

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

T H E

MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, Rural Economy & Mechanic Arts.

Vol. 6. BALTIMORE, FEBRUARY, 1869. No. 2.

SCIENTIFIC AGRICULTURE.

Less than forty years ago nearly the whole of the land under cultivation, in England, consisted of the dryer and lighter soils. These were the easiest to work and the most remunerative. They had been under crops from time immemorial, and so far had supplied the existing demand. But at last these soils showed evidences of exhaustion just when an increased population called imperatively upon them for an additional supply of food. This they in their worn condition were totally inadequate to furnish. Even under the system of naked fallows, which kept half the land out of cultivation annually the soil could not, in this way, be brought up to the highest point of fertility. Every alternate year, under that system, or in some cases every two years, the fields lay idle and exposed to the action of the sun, air and rain, but their absorbent power was not equal to collecting a sufficient quantity of plant food required by the cereals to be grown on them. To make up the deficiency green crops were grown, and after grazing cattle, during the summer, were turned under in the Fall. All this was beneficial without doubt, but it failed fully to answer the purpose.—The course of improvement was forced to take a new direction. The lands were reclaimed by drainage. Vast marshes were cleared and rendered fit for the plough. Less grazing land was allowed, but the diminished area in grass was counterbalanced by increased fertility, as manures were brought from the neighbouring towns. When these became insufficient to enable the farmer to keep pace with the demand for consumption, artificial fertilizers, greatly concentrated and easily transported to remote distances, came into favour. Moors, commons, and the hilly and broken parts of farms, which it had been formerly deemed too costly to bring under cultivation and improve with barn-yard manure, were now brought into use. One cart load of fine bone dust was found, in many instances, to be equal to twenty cart loads of barn-yard manure, and then rose, by degrees, the present English system of thorough drainage, deep ploughing, free liming, and abundant and frequent manuring. Upon this found-

ation rests the great fact of that little Island being able in highly favorable seasons to supply the wants of the greater portion of its inhabitants from its annual harvests.

When its crops began to show a failing off men called on Science for aid, and Science, with its wonderful discoveries and analyses, came to the rescue.—New sources for acquiring manures were pointed out—new manures invented—the old have been husbanded, a more careful economy has been introduced in their application, whilst the constituent elements of plants, and the kind of food most favorable to their growth, have been determined. Draining and deep ploughing have led to the thorough development of the capacity of the soil. More than this, the farmer now enjoys full ability to avail himself of the abundance of the harvests, through the means of drills, thrashers, reapers and mowers, and all the improved implements which have so rapidly sprung from the mechanical genius of the age. It is interesting to note the gradual steps by which these changes succeeded each other. First, the lighter soils were brought into general use, as being, in that moist climate most susceptible of easy and profitable cultivation. As these became slowly impoverished they were allowed to recuperate by simple rest and the agency of nature. Then cattle were more extensively grazed and green crops ploughed under.—By this time the increase of population necessitated the taking in of a more extended area of land, difficult to work, but still susceptible, not only of cultivation, but of bearing heavy crops when properly tilled. The best and most capable of the moist and heavy clay soils were redeemed by thorough drainage. All sorts of domestic manures were then utilized. Bones were sought for and collected by collectors in every town and village, and were passed through the bone mill. Whole fleets of merchantmen brought cargoes of bones from Ireland, and even from Buenos Ayres, Montevideo and the United States. This draining and manuring enabled the subsoil plough to come into use with advantage, the water being drawn off and the land dry, the increased depth given to the soil was equivalent to more than doubling its area, and enabled the ma-

nures to send down their fertilizing properties to a greater distance when in solution, and to permeate all parts of the soil. The crops formerly condemned to draw their sustenance from rarely more than six inches of soil, have now a free range for their roots of from eighteen to twenty inches, an infinitely greater supply of plant food was thus unlocked for them. An English writer justly says:—

“He who by draining opens up and renders wholesome and life producing the surface of his fields to a double depth, adds in effect, to the available extent of his possessions. He makes them capable of yielding him larger returns, and for a longer period of years, without the risk of exhaustion. He will, in fact, be far upon the right road to realize the end and aim of the farmer, by raising the largest amount of produce in the shortest time at the smallest and with the least permanent injury to the land.”

Though the outlay for draining may at first be very great, yet where, as in England, land is both scarce and costly the expense is much more than repaid within a reasonable period, by those who have the capital to invest in such improvements. This more perfect system has been supplemented of late years by highly concentrated manures and labor-saving machinery. This scientific method of cultivation has resulted in giving an astonishing impetus to agriculture in all its branches, and the average crop of wheat has increased throughout England, from fourteen bushels to twenty seven bushels per acre; many of the best farmers now safely counting in a good season on forty bushels to the acre. This great and manifest improvement is largely due to the example set the smaller farmers by an enterprising class of scientific cultivators—men of large means and resources, who are constantly undertaking new experiments and making the results known to the world. They have, in many instances, thrown away money it is true; but they have also been largely successful in convincing the farmer that science really is capable of furnishing valuable aid to practical experience, a point upon which he has always been inclined to be more or less doubtful. These benefits are not confined to the country in which the experiments were made. When mere theory becomes fact, it soon crosses the Atlantic, and what has been demonstrated to be good elsewhere, if it be adapted to our soil and climate, readily finds converts among the most intelligent of our cultivators.

England first taught us the value of our waste bones, by the eagerness with which they were sought after by her agents. It was soon found out that they were worth more for home uses than the seven or eight dollars a ton these agents paid for them.—The guanos and commercial fertilizers were also brought into general use here through the teachings of her analytical chemists, and the influence of her

example. Her system of deep draining, except in marshy soils, is of less benefit to us, and whilst she still clings to summer fallows, our climate requires, from its extreme dryness, a covering of green crops. From this it will be seen that agriculture is becoming daily less a matter of routine tillage, and more of a science. It yields its more abundant returns to the man of the most enterprising spirit, to the man who is not afraid to open up new paths, and fearlessly follow them. It calls for a shrewd brain and a well trained mind as the condition of its highest success, and it will not be long before many of our older States, if they would preserve the fertility of their soils, will be required to take up scientific agriculture in the same spirit as it has been taken up in England.

How to Test Marl.

It is very easy to prove whether a soil contains much lime, or whether it is strong enough to be called marl. If strong vinegar or dilute muriatic acid be poured upon it, it effervesces more or less strongly, according to the amount of lime it contains.—But the green sand marl of New Jersey contains very little lime, abounds in potash and oxide of iron, with some magnesia, and will not effervesce much with acids. The lime marl contains from ten to sixty per cent. of carbonate of lime. The green sand contains ten to twelve per cent. of potash, with twenty per cent. of oxide of iron and fifty per cent. of silica, which no doubt furnishes silicate of potash, a direct food to our crops. But the principal effect of the marl is to act upon the vegetable matter in the soil. The potash of the green sand, no doubt, forms salts of potash, which become assimilable to plants.

As with caustic lime, marl has a much better effect when applied to land charged with vegetable matter than to poor soils. It produces a lasting effect, being very apparent for eight or ten years.—From fifty to two hundred bushels are applied to the acre, on the surface and cultivated in. The green sand marl has transformed Monmouth Co., New Jersey, from a nearly barren territory to one of the most fruitful regions in the State. Its potash has a most remarkable effect upon the growth of potatoes. And this might have been anticipated, as the ash of the potato contains about fifty per cent. of potash. The calcareous marls are very extensively distributed; but in this country where the soil is comparatively new, they are not yet fully appreciated, and remain an almost inexhaustible storehouse for the future generation of farmers to draw upon.—*Cor. Rural New Yorker.*

New Milch cows should be carded daily. They like it, and it pays.

Our Agricultural Calendar.

Farm Work for February.

We are now entering upon the threshold of that season when Spring work must recommence vigorously and in earnest. Thus far the winter has been a remarkably mild one, and it is fair to presume that the spring will open early. Perhaps even in the present month, as sometimes happens in the Middle States, the ground may be open enough and the soil dry enough for the ploughs to be kept running. There is, indeed, very often in the month of February a week or two of mild weather which is analogous to the Indian summer of the month of November. In any such case the opportunity ought not to be lost for pushing forward the ploughing for oats, as the earlier that crop is gotten into the ground, after all danger of very hard frosts is over, the better will be the chances of an ample yield at harvest. Even if the breaking up of the soil should not be possible because of the frost that still hardens it, there is other and quite important work that may be done. The manure in the barn yard may be gathered up and hauled out to the fields where it is to be used, and if the intention is to plough it under as soon as the condition of the soil permits it may be deposited in small heaps all over the field for that purpose. But if it is intended for corn it should be kept in one or more large piles on the field. So long as cold weather continues there will be no danger from waste or fermentation, but as soon as the ground becomes soft under the warm rays of the sun, each pile should be covered with six inches of soil to prevent leaching by rains and to utilize the volatile gases. Of course all the preliminary arrangements for spring work should now be made, fuel for the house be prepared in abundance—the farm implements in good repair, and the working stock nourished with an extra supply of food in view of the hard work upon which they are about to enter.

Collecting Manures and Composts.

All the spare time that can be profitably devoted to this purpose should be occupied in collecting materials for manure, and in forming them into compost heaps—wherever an available force can be employed in this work, no time should be lost—provided the snow is off the ground—in gathering in as large quantities of rough fibrous substances as it may be possible to obtain.

Ashes and Slops.

All the wood ashes made on the farm and all the slops of the weekly wash and all refuse from the house, except such as is food for hogs, should be added to the compost heap as being rich in all the elements that constitute the food of plants.

OUTBUILDINGS.

See that these are kept in good repair, and as a means of preserving them give them, if they need it, a good coat of white wash, or some colored wash, which may very easily be made by mixing with the white wash either ochre or venitian red, or for a cool grey, a very small quantity of lamp black.

FENCING STUFF.

We repeat our advice of last month to see that any fencing stuff that is required for the uses of the farm is gotten out of the wood before the sap rises,

Cleaning out of Fence Rows.

Seize every available opportunity for grubbing up and cleaning out the wild growth that infests the fence rows. A double purpose is thus effected—it adds to the neat appearance of the farm and prevents the adjacent fields from being overrun with noxious plants by the scattering of their seeds from the fence rows.

Sowing Clover and Orchard Grass Seed.

If snow is on the ground, or the soil from the mildness of the weather should be open and in condition, the month of February is a good time for sowing clover and orchard grass on fields that have been seeded to wheat or rye. Should the soil admit of it the seed should be harrowed lightly in and the roller should immediately follow the harrow. Sow not less than a peck of clover seed and a bushel of orchard grass to the acre.

Early Ploughing.

Any light soils may be ploughed to advantage during this month if the frost is out of them and the ground is not too wet. Clay loams of a medium texture may also be ploughed to advantage subject to the same conditions. On no account should a clay soil be broken up whilst it is wet, for it will in such a case dry into hard inert clods which it will be found very difficult subsequently to reduce and pulverize.

Tobacco Beds.

Attend early to the preparation of seed beds for Tobacco so that if any accident should happen to the young plants fresh seeding may be done in time to have the plants of a size to prick out the proper season.

Gates vs. Bars.

Substitute gates for bars in all the fields as rapidly as leisure can be had for that purpose.

Wagons, Carts and Implements.

See that these are all in perfect repair and ready for immediate use whenever needed.

STORE HOGS.

Feed these regularly three times a day. Provide them with good warm dry lodging places—put plenty of rough litter in the pen to be worked up into manure, and supply the hogs freely with charcoal, rotten wood, and wood ashes to promote digestion.

Breeding Sows.

Keep each sow in a separate pen and yard, and be sure to give her a sufficient supply of food to maintain her in a healthy condition without allowing her to get too fat.

Milch Cows.

The months of February and March press heavily upon cattle that have been fed on dry food during the winter. It is therefore advisable to revive their drooping appetites by giving them occasional messes of slops, to be alternated with feeds of chopped roots. Let them have free access to the yard, or the woods in mild weather, and at all times see that they are regularly watered.

In Calf, Cows and Heifers.

In-calf cows now require especial attention. See that they are fed with nourishing food and slops, and are not stinted as to fresh pure water. Young heifers also demand extra care as spring approaches to keep them in condition.

Garden Work for February.

If the season should continue mild, as it now promises to be, there are some few matters that may be attended to in open air gardening during this month. But if the frost locks up the ground, nothing can be done beyond arranging for hot beds and hauling out a good supply of the richest and best rotted manure, in readiness to be dug well in as soon as the soil is in a condition to receive it.

Sowing Seeds in Hot Beds.—After the hot beds have been formed and the heat has risen, sow in the light dry loamy soil that constitutes the seed bed, the seeds of early and late Cabbages, of Tomatoes, Egg Plants, and of Lettuce, Cauliflower and Broccoli. If there is room to spare, early radish seed should be sown in rows—if however, there is no other way, scatter the seed broadcast over the whole bed, as radishes are quick growers and can be withdrawn from the bed before the other plants are large enough to be over crowded.

Celery in the open air.—As soon as the frost is out of the ground select a warm sunny border and sow therein celery seed, to succeed the plants raised in the hot bed.

Peas.—Peas are sufficiently hardy to stand without serious injury a heavy frost. If the soil is in condition spade it deeply and plant also double the usual depth a few rows of early peas for spring use.

Spinach.—The first requisite in growing good spinach is to make the soil very rich. As soon as the frost is out of the ground select a good warm border, spade in a liberal quantity of rich manure and after raking the bed thoroughly sow spinach seed thinly in drills about an inch deep and twelve

inches apart. If there should be subsequently any danger of frost scatter some straw thinly over the bed.

Parsnips, Carrots and Beets.—A light sandy loam is the best for parsnips and carrots, but beets grow well in a heavier soil. The manuring should not be done the present season as it is apt, if the manure is fresh, to cause carrots and parsnips to fork. If however, manure is needed it should be thoroughly well rotted, and well spaded under. The drills for carrots and parsnips should be at least twelve inches apart, and for beets it is better to have them eighteen inches.

Grape Vines.—Grape Vines if left unpruned in November should be pruned this month before the sap rises. Head back the canes that are too long. Cut back to a single eye every alternate cane and let them remain free of the trellis until they have put out their first leaves. Then tie them up. Dig in lightly a compost of bone dust and wood ashes, and take care not to injure the roots of the vines.

Raspberry Vines.—Trim and tie these up. Fork well round each vine to make the soil light, and manure freely.

Gooseberries and Currants.—Prune these about the middle of the month. Dig about the roots and apply manure freely. If cuttings are required take shoots of last year's growth. Let each cutting be from twelve to fifteen inches long. Cut out all the eyes except the three or four that are to form the future head, and plant the cutting in a well prepared bed taking care to shield the cuttings from the noon day sun until they have struck root. Water freely until rooted and after that occasionally in dry weather.

—————♦♦♦—————

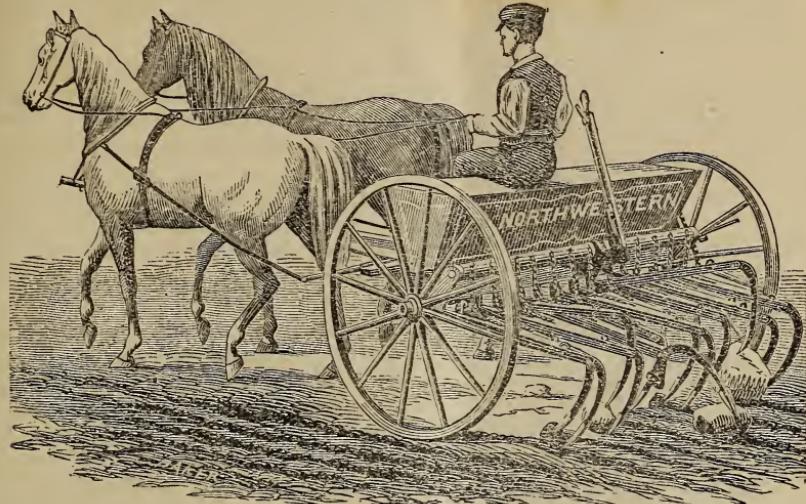
REMEDY FOR CLUB FOOTED CABBAGE.—Several remedies have been suggested—change of cropping—or a thick dressing of wood ashes, charcoal dust or marl is generally successful.

Sometimes a mixture of wood ashes and road scrappings is placed in every hole made by the dibble, so that the roots of the young plants may at once come in contact with the alkaline substance. Deep trenching and dressing with quick lime is recommended. The *Gardeners' Chronicle* recommends an application to the roots of the young plants of the following: "One gallon of fresh soot and one pound of saltpeter reduced to a powder and mixed with water to the consistency of tar. The root of every plant is dipped in this mixture before planting." This plan is said to be perfectly efficacious.

—*Ulrica Herald.*

John Johnson says that farmers must give special attention to sheep and cattle keeping if they want to make grain growing more profitable.

BROADCAST SEED-SOWER AND CULTIVATOR COMBINED.



This machine was exhibited by Messrs. Eggleston & Swain, at the late Iowa State Fair, of which the Committee on Labor-saving Implements in their report, say :

"The above cut shows the machine passing some obstructions. The tube below the axle in other machines is discarded ; the seed is scattered by a vibrating scatterer ; it will not clog up, and distributes the seed evenly on all kinds of ground. The draft is light and equal. The gauge is perfect, and the machine will sow one quart of timothy, or eight bushels of oats per acre. Price \$75." Circulars containing full particulars mailed to any one free by addressing Eggleston, Swain & Co., Milwaukee, Wisconsin.

IMPROVED FARMING IMPLEMENTS.

MILWAUKEE, WIS., Jan. 14th, 1869.

To the Editors of the Maryland Farmer :

In one of the articles in your January number, speaking of labor-saving machines for farm purposes, the writer says : "In the new state of things and scarcity of labor, labor-saving implements are constantly inquired about, and it is a wonder that those who have invented, such as are new, do not take more care to introduce them to the farmers, by advertising them, setting forth their good qualities, prices, &c." To a casual observer it does seem a wonder truly, but if the writer will look into the facts of the case he will find—first, that as a general rule the inventor is a man of limited means, and by the time he has matured and perfected his improvements his money is gone, and advertising extensively requires money. Second, the inventor, nine times in ten, is a man unacquainted with the best manner of bringing his improvements before the people, even though he is fortunate enough to have the needful. Again, in this fast age of improvements and sharp practice, it matters but little how valuable an invention may be, the inventor must demonstrate its value fully before those who have money are ready to invest it in the manufacture of the article, whatever it may be, (as at least nine patented

articles in ten are of no real value,) so that after all it is not so much wonder that many really valuable articles, newly invented, are not extensively advertised. And speaking of new inventions, calls to mind one of the most successful ones that has come under our observation in many years. It is a machine for sowing grain broadcast and cultivating it in at the same time. This machine has all the advantages of a drill, getting it in at a uniform depth, while at the same time it is a most perfect cultivator for every purpose for which a cultivator can be used, thus doing the work of two machines. This is a Wisconsin invention, Messrs. Eggleston & Swain of Milwaukee, are the patentees, and though they did not secure a patent until 1867, these machines are sold and used in Wisconsin, Minnesota, Iowa, Illinois, Michigan, New York, Pennsylvania, Kansas, Nebraska and Missouri, and now rank first among machines of its class. Knowing, as the writer does, some of the many difficulties these gentlemen have labored under in getting their machines before the farmers of the country, it has certainly been a wonderful success. The writer of the article above mentioned, also speaks of the high price of reapers, mowers, &c.; now it seems to me the farmers themselves have it in their power to remedy this wrong, at least such is the case in this western country. For example, nearly all the implements sold to our farmers are sold by traveling agents or canvassers; these men receive a large percentage on their sales, over and above the dealers profit.—Now, then, if the farmers would not buy of traveling agents, but deal directly with responsible tradesmen with whom they are acquainted, there would be a saving of from 10 to 20 per cent. to the purchaser (at least in the west.) But so long as the farmer will buy of canvassers, just so long must dealers employ them, and the farmer must pay the extra expense in an additional price to his machinery. These thoughts suggested themselves as we read the article referred to, and if you consider them worthy of attention can give them to your readers. Wishing your valuable magazine a long and useful career,

I am, yours, truly,
"BADGER."

FOR THE MARYLAND FARMER.
THE FARMER VS. THE MERCHANT.
TO YOUNG MEN.:

It is well to keep up the agitation of this subject so ably discussed in the December number of the *Maryland Farmer*. So many young men are rushing to the city to make their way in the world, that those whose experience enables them to do so should raise a warning voice against this change from that which may have a few difficulties to that, which presents many more and greater disadvantages. You will find one reason for the change almost invariably given—it is easier to get a living in the city. From experience and observation in city and country, I am led to the conclusion there is no vocation which will give its followers as many of the comforts and luxuries of life, for the same amount of labor as farming. Suppose a young man secures a situation of clerk in the city at a salary of \$300 per year, (and a beginner from the country unskilled in business could not get more, very often less,) it will take all that to board and clothe him the first year. By degrees we will suppose his salary increased to \$500 the fifth year, which is \$50 increase per year, as his circle of acquaintances and liabilities would increase, his expenses would increase also. Now, how much would he have saved at the end of the five years? In a city the great part of the business is conducted in-doors, in confinement, and after business hours one who has been confined within four walls for eight or ten hours feels a strong desire for some kind of relaxation, which shall be separated from the idea of restraint, and he certainly does not find that relaxation in the cold and unsocial parlor of a boarding house. He seeks it abroad and a thousand snares are set for his footsteps. The streets are light and thronged with a crowd of pleasure seekers. Bands of music are playing from the balconies of theatres and opera houses; the tinkling of glasses is heard from innumerable bar-rooms; the rattle of billiard balls and ten-pins goes out upon the night air like so many invitations to come in and be merry. Here a witty auctioneer, and there a comic musician appeals to his senses, and besides all these there are other forms of amusement, not vicious in themselves perhaps, but calculated to take from him his time and his money, and give him, what? Will he have received an equivalent for what they will have cost him in time and money? Will he better mentally, morally or physically at the end of five years for the manner in which he has spent his leisure? And to a young man so situated it is merely a question in which of these or worse places he will pass his time, and with so many inducements to spend money in company, balls and other entertainments, if he has saved two or three hun-

dred dollars it is more than most do. We will place the matter in its most favorable light, and suppose that he remains five years more, and at the end of the ten years can show one thousand dollars, and how many young men at the end of ten years' clerkship can show even that amount? This will constitute his capital for future operations. To secure this result it has been necessary for him to exercise honesty, industry, perseverance and business capacity. He has been busy from seven in the morning until six at night, summer and winter, wet and dry, hot and cold; for the duties of a clerk are exacting and inexorable, and we find him at the end of ten years, as a consequence of his confinement and mode of life with weakened constitution and impaired health, which will stand as a serious barrier to his future success. And now let us look at the other side of the question. A young man with sufficient capacity and education to make a business man in the city could secure a more desirable position on a farm than the ordinary illiterate farm hand, and get say \$200 a year and his board. In the country there is little inducement to make much show, and in the absence of temptation the young farmer would have no difficulty in saving at least \$125 of his year's salary. At the same rate (for the value of his labor we will suppose to be the same, year after year, without the increase which usually attends fidelity and industry upon the part of a clerk) this would give him at the end of seven years, interest and all, over one thousand dollars, which would enable him to begin on his own account, and that is not all; he would start with a good knowledge of his calling, with established health and a vast fund of varied information upon subjects not connected with his occupation, gathered during spare moments and long winter evenings, for the country is the reverse of the city in this respect. After being out all day, it is a relief to sit down quietly at home and pass the time over some book combining instruction with amusement, and many are the names bright upon the page of history, whose owners have gone from the plow and fireside preparation, to dictate the destiny of nations. While the city clerk would be listening to a comic song, because that was the first thing that presented itself for his amusement, the young farmer would be busy upon some text book of agricultural science, because that presented the best means of passing his time. Limited capital, poor health, increasing expenses, the mental strain consequent upon a life of competition and the necessity of maintaining a certain position upon one side, and the robust independence of a man that feels nine-tenths of the battle are his, because he has a good start, upon the other; and from the moment each starts for himself, the amount of labor the city clerk will perform is

vastly greater than that of the young farmer, and the only proof of this necessary, is the statement of the statistician, "the farmer lives longest." Rainy days, attendance upon fairs, markets, sales, store business, &c., occupy much of the farmer's time, which is spent by the clerk or merchant in the same close office or store, upon the same monotonous duties which have engrossed his attention for many years. And right here lies the grand beauty of the farmer's life—its variety—nearly every day furnished a special duty, or differs from the preceding one in bringing the job on hand nearer its termination. It is no looking backward and forward and around upon the same weary, unchanging waste of an uncompleted and interminable task. In connection with the monotony of a city business is another fact furnished by statistics—for every three successes in mercantile pursuits there are ninety-seven failures. In admiring the glory of three triumphant arrivals at the port of Success, we must modify it by the contemplation of ninety-seven shipwrecks strewn upon the ocean of its difficult career. Here I must leave this parallel as P. P. has followed it to the end.

In my next I will add a few words upon another branch of the same subject, viz: Why a young man of good abilities should devote himself to agriculture and remain in the country instead of going to the city to study law, theology or medicine, should he conceive that one of the professions offers a better sphere for the exercise of his talents.

D. L., of Howard County.

TOP-DRESSING OF LANDS.—It is a disputed point, says the *Rural New Yorker*, among writers in the agricultural papers, whether surface manuring of wheat lands is good or otherwise. Some think the best results follow from manuring at the time of seeding; others would make the application after the seed is in the ground. A third class, and, perhaps the more numerous one, think the manure should be plowed under before seeding, as this will prevent the escape of ammonia into the air where it is supposed to be lost to the crop. The rural world favors the top-dressing of wheat lands, at the time of seeding, if the manure be fine and well rotted; if not then after the seeding is done. This is recommended for the double purpose of supplying food to the young plants, and as a reputed preventive of the ravages of the chinchbug.

DRYER FOR DISSOLVED BONES.—Messrs. John Merriam & Co., of Baltimore, inform the editors of the *Southern Cultivator* that they use no "dryer" in preparing dissolved bones, drying it simply by constant stirring and exposure to the air.

A NEW USE OF THE SUB-SOIL PLOW.

To the Editors of the *Maryland Farmer*:

Having now had time to observe the result of an experiment in restoring to a full set of grass a piece of land of a close tenacious character, which had been carted, and otherwise traveled over, until the surface had become so hard that nothing could grow on it, and most of the grass destroyed, without inverting the surface, and fallowing, or cropping the land for a season—I propose to give you a description of the mode by which this was accomplished:

The area was a triangle of perhaps a third of an acre, located by the side of carriage roads and was a portion of a lawn, where it would have been very objectionable to have broken up and cropped the land preparatory to seeding, which I decided to avoid doing if possible, and resorted to the course I shall describe, and realized a result so satisfactory that I have decided to communicate it to the readers of the *Farmer*.

The field of experiment had been well prepared and set to grass some four years previously, but had been traveled over, of necessity, in making extensive improvements, until its condition was as above described.

Many grass plants were still alive, but the ground was so compact, and the surviving plants so bruised and denuded, that they could not recuperate without assistance, and if all were restored that showed signs of vitality, a large portion of the surface would still have been unoccupied. I used the sub-soil plow as a surface plow, taking advantage of a condition of the soil, as it regards moisture, the most favourable, in the use of a steady strong team and a skilled plowman, with a driver, which was necessary on account of this plow leaving no open furrow to guide the team, I plowed the land eight inches in depth, and crossed plowed, then re-seeded it, rolled the surface with a light roller, and top-dressed with good well decomposed stable manure.

Very few of the plants, yet alive, were injured by the process, on the contrary they recuperated very rapidly, and soon grew and developed so that they afforded protection to the young plants of the new seeding, which also grew well, and at the end of twelve months this portion of the lawn was very nearly as good as it was originally.

This work was performed in September, after a rain, which so softened the soil as to prevent it from breaking up in large lumps.

The use of the harrow was tested on a small portion of the experimental plat, but it drew many of the grass plants out of the ground, for the preservation of which this new mode of tillage was instituted, hence, its use was discontinued. The writer has known numerous instances of old meadows in which

the grass had failed so as not to be remunerative, and which the owner was obliged to break up and crop, though very reluctant so to do, on account of the unsightliness of the tilled soil in positions that were conspicuous from the dwelling, or the carriage approach.

I am now well satisfied that these lands might have been re-set with grass without destroying that still surviving, without exhausting the land by cropping, and the unsightliness of tillage crops avoided at points where it was particularly objectionable, and with all a good full set of grass produced. It is proper to state in this connection, that there are few sub-soil plows in the country that deserve the name.

I use no implement which I have found more valuable to me, or that served for a greater number of valuable purposes than the sub-soil plow which I use.

I propose to describe the peculiarities of its construction, and some of the uses for which I have found it invaluable, for the benefit of those who do not properly appreciate this implement for the reason that they have no experience in the use of a good one.

The sub-soil plow which I have used for the past twelve years is constructed entirely of iron and steel, is not as heavy as many surface plows, and will resist the strength of four good horses required in breaking up chalky or slatey rock, which I have frequently been compelled to do to produce depth of soil for planting trees, *e. g.* I used this plow and four heavy horses on the Antietam Cemetery grounds, where I was obliged to form a soil of a rocky sub-soil from which the surface soil had all been removed in grading. This I did effectually to the depth of twelve inches or more, by repeated plowings and following this plow with my grading and clod crushing machine, which process reminded me of natures way of forming soils by the action of the glacier, a "rasping process," as described by that distinguished naturalist Prof. Agassiz, in his treatises on "the formation of soils."

This plow is a double plow, both right and left hand, hence is adapted to be used in conjunction with surface plows for either hand. This characteristic gives it double the durability of the ordinary single plow.

The points are each a plain bar of steel, ten to twelve inches in length, so constructed and set that they are self sharpening, a very economical characteristic. The mould-board is so arranged that it leaves the furrow slice broken up and pulverized by it, nearly level on its surface, and the width of its furrow sufficient to pulverize a belt of the width of that usually cut by the ordinary surface plow. In its use in sub-soiling ordinary subsoils to the same

depth as that usually cut by the surface plow preceding it, the draft of it is no heavier than that of the surface plow, and the labor of holding it is less.

In the excavation of ditches and drains, large cellars, and in preparing the soil of "borrow pits" for shoveling, this plow and a steady strong team and skilful plowman, may easily be made to perform the work of one hundred men with picks.

Soil loosened by it shovels more easily than that loosened by the pick, as it leaves a smooth floor, while the pick leaves an uneven one on which to work the shovel, which the practical excavator readily appreciates.

In an experience of more than twenty years with the use of the sub-soil plow in tillage for crops, I have found it profitable in every case but one.

The circumstances of this failure was in consequence of its injudicious use, where it should have been in conjunction with proper underdraining, for the want of which it provided for receiving a large amount of water into the soil in a short space of time, which was so long in flowing, or filtering out of the soil, which had a very gentle grade, that the lower portion of the field, having a tenacious sub-soil under that broken up, had an excess of moisture in it almost from the period of one fall of rain to another, by which this portion of the field was rendered unfit for corn while the higher portion was materially benefited.

With proper under-draining this result would not have occurred, here it is only chargeable to the injudicious use of this invaluable implement.

Yours, truly, J. WILKINSON,
Landscape Gardener, Baltimore, Md.

New Steam Plow.

The New Orleans *Picayune* thus notices a new invention by one of its citizens:—We are glad to record the invention by a citizen of New Orleans, Mr. J. C. Delavigne, of a most important implement in agriculture. It is a steam plow, not like that of Fowler, exhibited at our Fair, which consisted in two engines placed on opposite sides of the field, and drawing the plows back and forth, but running with its work through the field, and being, therefore, far more simple, less weighty and less costly, both to operate and to purchase. It is an ordinary portable steam engine, placed upon a platform, of which it becomes the motor, and which supports the operators, who guide it from the engine and attend to the plows, cultivators or harrows, which can be attached in the rear. The simplicity of the arrangement is greatly in favor of it, and we trust the inventor will have an early opportunity of showing its effectiveness.

FOR THE MARYLAND FARMER.

LIEBIG ON THE EXHAUSTION AND MANURING OF SOILS.

BY J. F. WOLFINGER, MILTON, PA.

Justus Liebig, the great German chemist of Europe, has spent upwards of thirty years of his long and active life in investigations and experiments touching those plant foods and laws of nature that lie at the foundation of a permanently successful agriculture. And in his last publication, entitled "*The Natural Laws of Husbandry*," published in England in 1863, and republished here in America the same year, he gives us the carefully studied results of his enquiries. In the 5th chapter of this book he treats of "*The System of Farm-yard Manures*," and says :

"A simple law of nature regulates the permanence of agricultural produce. If the amount of produce is in proportion to the surface presented by the sum total of nutritive substances in the soil, the permanence of the crops will depend upon the maintenance of that proportion. This law of compensation, the replacement of nutritive substances which the crops have carried away from the soil, is the foundation of rational husbandry, must above all things be kept in view by the practical farmer. He may renounce the hope of making his land more fruitful than it is by nature, but he cannot expect to keep his harvests up to their average if he allows the necessary conditions for them to diminish in his land. All those farmers who cherish the notion that the produce of their fields has not declined have not hitherto been able to appreciate the force of this law. Assuming that they have an excess of nutritive substances to deal with, they think they may continue drawing upon it until a failure becomes visible, and then they fancy it will be time enough to talk of compensation. This view results from want of understanding the nature of their own acts.

"There surely can be no doubt that to manure a field which already contains an excess of nutritive substances is opposed to a rational system of cultivation; for what end could be gained by increasing the nutritive substances in a field where a portion of the elements already existing cannot, on account of their mass come into operation? But how can sensible men talk of excess when they are obliged to use manure in order to keep up their harvests, and when their crops decline if they employ no manure?"—(Laws of Nat. Husb. 232.)

And then after answering and showing the great error of those who asserted that Rhenish Bavaria and other districts of country in Germany had lands that were inexhaustibly rich and fertile, he says :

"There can be no doubt that in the earliest periods most of our cultivated fields gave a succession of abundant crops without manuring, as is the case even now with many fields in the United States of America. But no fact has ever yet been more clearly established by experience than this, that in the course of a few generations all such fields are found perfectly unsuited for the growth of wheat, tobacco, and cotton, and that they recover their fertility only by manuring."—(Idem. p. 236.)

And then after showing how "our ignorant prac-

tical husbandman" everywhere errs and makes great mistakes about the real wants and conditions of his own lands as well as those of his neighbors, he closes his 5th chapter as follows :

"The visible gradual deterioration of the arable soil cannot but command the serious attention of all men who take an interest in the public welfare. It is of the utmost importance that we do not deceive ourselves respecting the danger indicated by these signs, as threatening the future of the populations. An impending evil is not evaded by denying its existence or shutting our eyes to the signs of its approach. It is our duty to examine and appreciate the signs; if the source of evil is once detected, the first step is thereby taken to remove it forever."—(Idem. p. 244.)

Farmers and land owners may talk as they please about the inexhaustible fertility of their lands, but it is after all a miserable delusion, for all lands, however rich, will gradually lose their productive power and at last become poor, too poor to yield good crops of any kind. And, hence, the necessity for manures too keep up the strength of our soil. And it is great folly, very unwise for us to withhold this manuring "until a failure" of our soils strength and productiveness has "become visible," as it will then require a great deal of time, labor and manure, and, at times, far more than we can command to make our grounds as rich and fertile as they once were or ought to be. Some of our farmers here and there throughout our country may, indeed, be excessively rich, but even they will gradually fail and need fresh supplies of suitable manure to restore their wasting energies. And if we have good manure, it is much better to put it upon lands that do not need it than to let it go to waste or run away in a liquid form from our barn-yards. But we have so much poor land now that our only trouble is how and where to get manure enough to renew the fertility of our worn-out soils. So reader make sure, and apply to your grounds all the manure you can get, since it is better to have land too rich than too poor, and there is not much danger after all of our making our lands too rich. It will be time enough for us to guard against that end when we see that our lands are in danger of being too rich.

DISSOLVED BONES.—One of the greatest boons which science has conferred on agriculture is that of dissolving bones before using them. In the condition in which bones originally exist, and even when they are ground to the finest powder, they are still comparatively insoluble, and we must apply a large quantity to supply the growing crop. When dissolved by means of sulphuric acid they are then very soluble, can be spread much more equally over the soil, and will exert a much speedier influence on the crop.

WOODEN COLLARS AND SADDLES.

RICHMOND, January 5th, 1869.

To the Editors of the Maryland Farmer:

"Hard times," or "Flush times," I cannot be without a monthly visit from the *Maryland Farmer*.

It is an eminently practical institution, and for the variety of useful information it contains, is invaluable. One only improvement I would suggest; it is that you persuade your correspondents to give the sanction of their names, to their contributions.

It gives dignity and force to any statement of facts; and more to any expression of an opinion on practical subjects, to offer the responsibility of a name—even though it be unknown.

I am sure I have not noticed an article in the past volume that furnished either in matter or manner, a pretext for an anonymous signature. Can you inform me where, if at all, collars made after Mr. Fessenden's plan can be purchased. His idea is a practical and valuable one—none the less so because it was successfully demonstrated thirty two years ago, to my knowledge, by an ingenious neighbour of mine, in Hanover county in this State, by the name of *Chesterman*. He would use no other but wooden collars and hames, all in one; and they never chafed his horses. He used poplar for lightness, and being a mechanic made them himself; and thus, perhaps, they never came into notice. I have often intended, but always neglected to adopt the plan, as every practical consideration recommends it.

By the way, however, I did adopt and have used, with much satisfaction, another important comfort for plough teams, introduced about the same time; and I will now discharge the duty, so long neglected, of introducing it to such of the readers of the *Farmer*, as have never become acquainted with it.

It is a simple wooden saddle, used to protect the back bone of the plough horse, or mule, from abrasion, and is made in the following simple and inexpensive mode—take two pieces of poplar, about 7 by 9 inches, and 2 or $2\frac{1}{2}$ inches thick, according to the rotundity or sharpness of the animal's back—round off the corners, and the lower edges, giving them the form of a slightly convex pad, on the under side—couple them together with two transverse leather straps, two inches or less in width, leaving the pads rather further apart on the hind part of the saddle than in front; and both wide enough to straddle, comfortably, the back-bone. These straps should be put on with 1 inch wooden screws, with large heads—say number 12—2 or 4, on each end of each strap. Now fasten, with screws also, a longitudinal strong leather loop, 1 inch wide, on each pad to pass the back band through; and though you use even rope or grapevine (but that day is long past) you will never have a horse or mule with a sore back, from ploughing. If the saddle is proper-

ly made, it is simply impossible that it should ever happen—they will last for long years—the only difficulty I found with them was, that my heedless plowmen, seeing that I could so readily replace them, sometimes misplaced them in the intervals of plowing seasons. I know of no single appliance in the department of farming, that is worth so much more than its cost, as this simple contrivance.

Enclosed I hand you my subscription for 1869.

Very respectfully, JOHN I. WERTH.

[In reply to our correspondent in regard to the Fessenden collar, we can only say that we have no knowledge of where they are made, nor do we believe they are manufactured for sale anywhere.]

SHENANDOAH VALLEY, VIRGINIA.

To the Editors of the Maryland Farmer:

As some of my friends are desirous of purchasing and residing on lands in a warmer and more even-tempered climate than we have here in Pennsylvania, allow me to enquire and solicit truthful answers to the following enquiries through your *Maryland Farmer*, viz:

1. What is the length and breadth of the Shenandoah Valley in Virginia, and into how many counties (naming them) is it divided?
 2. What is the general nature of the soil; is it deep or shallow, and of what color, and stony or free from stones?
 3. How is it off for springs and running waters, and for building stones and timber, naming the different kinds of water, stones and timber, and in what counties they are?
 4. What is the general price per acre of unimproved or wild farm lands, and what of improved farms, with good houses, barns and other outbuildings, and of improved farms destitute of such buildings?
 5. Which counties in this Valley are the best for raising grain, and which for raising grass crops and cattle?
 6. What are the present prices there of the various farm products per bushel or pound?
 7. What is the average wages per day or month of farm laborers, with or without boarding, and what is the usual price per day for carpenters, stone masons, bricklayers, plasterers and other mechanical work?
 8. In what part of this Valley would men of small means do best to purchase and settle?
 9. Of what nationality is the prevailing population of this Valley—German, English or Irish—and where are they for the most part settled?
 10. What are the names of the chief towns in this Valley and their present number of population, and are they traversed by railroads or canals, or both, and how far are those towns from Baltimore and from Washington City?
- Any answers made to these enquiries through your journal will be thankfully received by the inhabitants of our Middle and Northern States. And if any persons have special information of any kind, either written or printed, to communicate touching lands for sale in either Maryland or Virginia, they will do a favor by sending the same to Box No. 146 Milton Postoffice, Northumberland county, Pennsylvania, at any time between this date and the middle of April next.

A PENNSYLVANIAN,

NAVY AND ARMY BEAN.

To the Editors of the Maryland Farmer :

The best beans for the service or for culinary purposes, are the large White Kidney and the small round white or "Cock-Stone," the former may be cooked either in the green or dry state; both are late and the most productive of their class.

The early China Dwarf or red eyes, and the Black Dwarf, (Mexican Frigoles,) are also good kind for field cultivation.

Any quantity, (especially the former,) can be sold, price averaging \$3 per bushel. There is no vegetable produced that so nearly supplies the place of animal food as the bean.

Soil.—The bean is partial to a quick, dry alluvial soil; heavy manuring, especially with fresh manure, gives a large quantity of vine without a corresponding quantity of fruit.

CULTIVATION.—The land should be cross-plowed and thoroughly harrowed, and if inclined to wet it should be ridged..

In this, (Baltimore county,) we plant from the 15th of April to the 1st of June, or any time that corn can be safely planted; in other words, plant when the soil is warm and frost not apprehended. Some years since we were much annoyed by the Borer, which completely riddled our *dry* beans. We escaped the pest by late (25th May) planting. They are usually planted in drills two feet apart, and also in checked hills two feet apart. They have also been broadcasted on clean dry soil and produced largely.

The most expeditious plan to drill beans is to use a horse drilling machine, which will open the furrows, drop, cover and roll at the rate of about six acres per day, or the beans may be thrown along the drills with tolerable regularity. Quantity of seed required per acre, in drills or hills, 4 to 8 pecks, quantity depending on the size of seed. If broadcasted more seed in proportion. The beans ought to be covered about two inches deep. If a drill machine is not used, the drilled beans may be covered with a harrow running parallel with the drills; also harrow the broadcasted beans. Those in hills are covered with hoes and after the beans are planted, on either plan proposed, (except when a drill machine is used,) the field should be rolled for the purpose of breaking clods and compressing the soil on the seed. When the beans are about three inches high earth them up and repeat the process when the buds appear; keep the crop clean of grass and weeds, pulverize well with small plows, cultivators or with the "bull tongue."

If the land is not seriously filthy hand hoes may be dispensed with.

I ought to have said before, plant 5 or 6 beans in each hill, and in drills 2 to 3 inches apart.

HARVESTING.—When the latest pods assume a light yellow color pull them up and throw them in small heaps. If not dry let them remain a short time, then put up stakes at intervals, and around them large piles with the roots in the centre, and secured at top with a wisp of straw, when well dried thrash and clean them, and when the beans are well dried, pack in barrels or bags. The haulm is an excellent fodder for sheep, swine, cattle, and poultry thrive on the bean when boiled. Product 30 to 50 bushel per acre.

As a culinary the bean is dressed in various ways. For a Friday dish we make a soup composed of beans, carrots, tomatoes, turnips, celery, potatoes and onions.

No. 2.—Pork and Beans.—Both are first boiled, the beans then poured in a flat pan, pork in the centre, the top covered with *molasses* and baked brown, an A 1 dish.

No. 3.—Beans and a small piece of pork boiled is an excellent soup.

No. 4.—Black bean, Mexican frigoles or turtle soup beans, boiled with chopped onions, a little salt and red pepper, an every day dish in Mexico.

No. 5.—A pint of beans mixed with 4 quarts of hominy, boiled five hours, and afterwards fried in lard and seasoned with salt. A favorite Southern dish.

Yours, PLOWMAN.

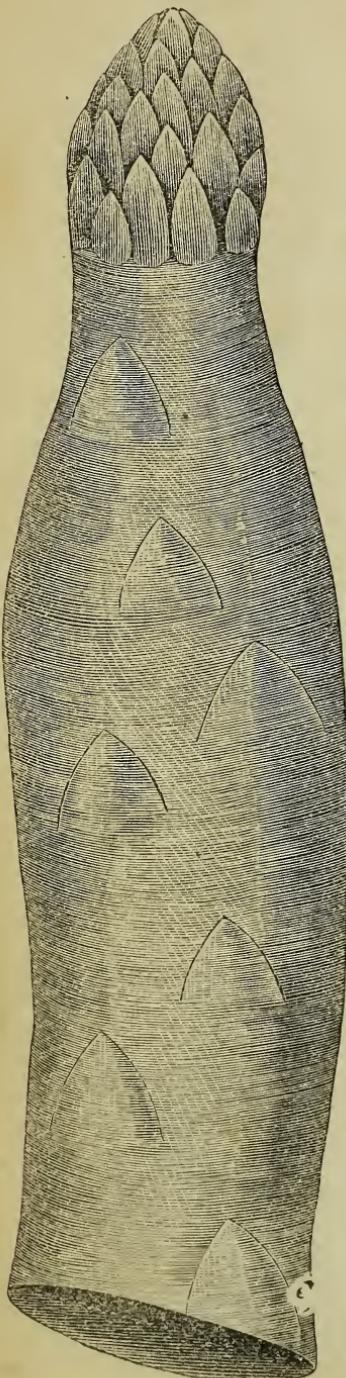
Small vs. Large Farms.

Robert Bakewell, the celebrated English farmer, used to tell the following anecdote of a farmer in Leicestershire:

"This farmer, who owned and occupied 1,000 acres of land, had three daughters. When his eldest daughter married, he gave her one-quarter of his land for her portion, but no money; and he found by a little more speed, and a little better management, the product of his farm did not decrease.—He then set to work, and began to grub up his furze and fern, and ploughed up what he called his poor, dry furze, covering in some places nearly half the land. After giving half his land away to two of his daughters, to his great surprise he found that the product increased; he made more money, because his new, broken up furze land brought excessive crops, and at the same time he farmed the whole of his land better, for he employed more laborers upon it; he rose two hours sooner in the morning, had no more dead fallows once in three years; instead of which he got two green crops in one year, and ate them upon the land. When the third and last daughter married, he gave her 250 acres, or half of what remained, for her portion, and no money. He then found that he had the same money to farm one-quarter of the land that he had at first to farm the whole."

CONOVER'S COLOSSAL ASPARAGUS.

The best and most valuable novelty in Vegetables introduced in many years.



This remarkable variety was raised on Long Island, and very much improved from seeds imported six years ago from Europe; has been thoroughly tested alongside of the best selected stock of both foreign and home grown seed. On the same soil, and with the same cultivation and manure, it has made fully four times the growth of the best Oyster Bay Asparagus of the same age. It is such a vigorous grower, that at two years old from the seed, it will invariably send up from fifteen to forty sprouts from one-half to one and a half inches in diameter, consequently Asparagus may be cut for market or family use at least a year in advance of the ordinary sort; the color is deep green and the croyn very close.

Price, by mail, per $\frac{1}{2}$ ounce paper, containing nearly 800 seeds, 50 cents.

JAS. M. THORBURN & CO.,

15 John Street, New York.

J. M. Thorburn & Co.'s Annual Descriptive Catalogue of Vegetable Seeds for 1869, mailed to all applicants.

CULTIVATION OF ASPARAGUS.

BY D. P. BRUEN, OF NEWARK, N. J.

Read before the New York Fruit Growers' Club.

There is, perhaps, no succulent vegetable more generally valued for its palatable, nutritious, and healthful qualities than asparagus, which can be successfully cultivated in any climate, from the tropics to the cold, bleak shores of Lake Superior, where it is found growing wild. Asparagus is also found in its wild state in low and often flooded fresh and salt meadows, as well as in the barren salt sands of the seashore, and, when brought under proper cultivation, it gives a greater return for the labor bestowed than any other production of the market garden. Its proper mode of cultivation is less understood than any other vegetable product for table use. My first knowledge of asparagus (when a boy) some forty-five years ago or more, was an old bed in my father's garden, which bed was put out by my grandfather, before my father's recollection. There the asparagus was cultivated, on the same spot of ground, until about 1810, when it became necessary to have the garden in another location. The old asparagus roots were removed and carefully put out again, where they remained until 1852, when the bed was destroyed for the purpose of erecting a building.—From the time of the removal of the roots until they were destroyed, forty-two years elapsed, and from the time of the first planting of the roots by my grandfather till they were destroyed, was at least one hundred years.

MANURING ASPARAGUS BEDS.—The bed was always well cultivated; the old stalks were cut off in the fall; the bed was liberally covered with manure, which was forked in the spring. Until its destruction the asparagus never decreased in quality or quantity. These facts of my own knowledge are satisfactory to my own mind that the limited production of asparagus is only a neglect of its proper cultivation. I

find a great variety of opinions with writers in relation to the correct mode of propagating and cultivating asparagus. Some writers say it is necessary that the earth should be removed three feet deep or more, and the bottom filled in with stone, old boots and shoes, and the earth removed should be mixed with manure and returned, and the plants or roots should be set out eighteen inches or two feet apart, and be planted twelve inches deep. Others say that six to fifteen inches apart, and four to twelve inches deep, is preferable. With such badly balanced opinions among so many theorists, no definite mode of cultivation could be arrived at. Some ten years since I made an entirely new garden where I now live, and always having enjoyed the luxury of asparagus without depending upon the market for my supply, I determined to make a bed to suit my own views of the nature of the plant. My soil is a sandy loam. I prepared my ground with a large quantity of well-rotted manure, and divided my ground into beds five feet wide and twenty feet long. The ground was then dug up one spit deep, the length of a long spade blade. Believing that asparagus required the warmth of the sun, air, and surface moisture, and having no fear that the roots would run down beyond my control, I had my bed trenched (or marked out) four inches deep and twelve inches apart. The roots were two years old, and were taken from a garden adjoining my own. They were placed in the trenches twelve inches apart, as soon as dug from the ground where they grew. Each branch of the roots was spread out horizontally, and they were all covered four inches deep. The asparagus grew apparently as well as though the roots had never been removed.

SALT FOR ASPARAGUS.—The next year I cut from the bed, in sufficient quantity for my own table.—Every season, when the weeds commenced growing, I sowed broadcast one half bushel of salt, and the same quantity twice afterward, as the weeds began to recover. I always have asparagus before any appears in the market from the gardens in the neighborhood, and cut it every day from the time I commence until the season ends. The productiveness of my bed has increased every year, and all gardeners and others who have seen it pronounce it the most prolific bed they have ever seen. The average growth of the stalks at the time of seeding, is five to seven feet in height. I never cut my asparagus until it has grown at least four to six inches above the ground, and we never cut it over one inch below the surface. Some writers advise cutting two to six inches below the surface. But at that depth the bottom of the stems is always tough. Professor Mapes once stated that there are twenty-eight species of asparagus. Some writers have attempted to classify the different qualities. With my experience

in raising and largely consuming the article, I think I could quite as easily tell a black herring from a white herring, in eating them, as I could tell the difference in the quality or taste of the light purple-headed asparagus.

Cheap Smoke House.

A farmer in Western New York give the following as his plan for a good and cheap smoke house: No farmer should be without a good smoke-house, and such a one as will be fire-proof and tolerably secure from thieves. Fifty hams can be smoked at one time in a smoke-house seven by eight feet square. Mine is six by seven, and is large enough for most farmers. I first dug all the ground out below where the frost would reach, and filled it up to the surface with small stone. On this I laid my brick floor, in lime mortar. The walls are brick, eight inches thick, and seven feet high, with a door on one side two feet wide. The door should be made of wood and lined with sheet iron. For the top I put on joists, two by four, set up edgewise, and eight and a half inches from centre to centre, covered with brick, and put on a heavy coat of mortar. I built a small chimney on the top in the centre, arching it over and covering it with a single roof in the usual way. An arch should be built on the outside, with a small iron door to shut it up, similar to a stove door, with a hole from the arch through the wall of the smoke-house, and an iron grate over it. The arch is more convenient and better to put the fire in than to build a fire inside the smoke-house, and the chimney causes a draft through into the smoke-house. Good corncobs or hickory wool are the best materials to make a smoke for hams. The cost of such a smoke-house as I describe is about \$20.

INTERESTING FACTS.—A legal stone is 14 pounds in England, and 16 pounds in Holland. A fathom, 6 feet, is derived from the height of a full grown man. A hand, in horse-measure, is 4 inches. An Irish mile 2,540 yards; a Scotch mile is 1,984; a German, 1,806; a Turkish, 1,626. An acre is 4,846 square yards, 1 foot, and $3\frac{1}{2}$ inches. A square mile, 1,760 yards each way, contains 640 acres. The human body consists of 240 bones, 9 kinds of articulation or joinings, 100 cartilages or ligaments, 400 muscles or tendons, and 100 nerves, besides blood, arteries, veins, etc. Potatoes planted below three feet do not vegetate; at one foot they grow thickest, and at two feet they are retarded two or three months. There are no solid rocks in the arctic regions, owing to the severe frosts. The surface of the sea is estimated at 150,000,000 square miles, taking the whole surface of the globe at 190,000,000 square miles. Its greatest depth is supposed to be equal to the height of the highest mountain, or four miles.

APATITE:**Its Importance in Domestic Economy.**

Apatite is a mineral phosphate of lime, similar in character to the bones of animals. This mineral phosphate is most essential to various kinds of vegetable growths, it being taken up from the earth and assimilated as one of their essential elements.

The mineral part of the bones of animals consists to a great extent of phosphate of lime. It must therefore naturally play an important part in agriculture; and, indeed, such for ages has been the general impression. Burnt bones lose by calcination one third part of their weight. This consists of organic matters which is destroyed by the process of combustion. The residue is phosphate of lime, with from ten to twelve per cent of carbonate of lime, and a little fluoride of calcium and magnesia. Apatite, on the other hand, contains ninety per cent of phosphate of lime. The residue is chloride and fluoride of calcium. In the Canadian apatite about five per cent of silica and a small portion of carbon have been found. Burnt bones are much employed in the manufacture of porcelain. They are mixed to the extent of nearly forty [per cent. with the other ingredients, such as clay, feldspar, and flint. The reason of its employment lies in the fact that the phosphoric acid contained in the compound is the vitrifiable element, which, at a high temperature, converts the other ingredients into a transparent enamel. Brazil and other countries, where the hides and bones of animals are of more account than their flesh, supplies the largest number of the latter for fertilizing purposes. Bones are likewise used in the arts for the manufacture of buttons, combs, and also in the production of phosphoric acid, phosphorus, phosphate of soda, and microcosmic salt. A large amount of bones are utilized by exposure to continued steam, which extracts from them all their grease and other organic matter. They are then ground and sold to the husbandman. The supply of bones is altogether inadequate to the demand, and in order to make up this deficiency other sources of phosphate of lime have been sought out. Guano, or *Huano*, as it is termed in the language of the Peruvians, which consists of the accumulated and altered excretions of certain kinds of sea-fowls, was discovered in the hot climate of Africa and Peru some thirty years ago. It found a ready market in France and England. Coprolites were also found in large deposits, they proving to be the exuviae of animals of former times, or in other words, the fossil excrements of extinct animals. They contain about sixty per cent of phosphate of lime. The crystalline mineral phosphate of lime, or apatite, is found in nature in large quantities, especially in Norway, Sweden,

Spain, Canada, and also in other localities. It has, of late years, been eagerly sought after to supply the great demand for phosphates as fertilizers.

It is, however, well known that neither bones, coprolites, nor apatite is applied to the soil in its insoluble state, being, in that condition, comparatively useless as regards the nutrition of plants. In order to render them fit for agricultural purposes, they must be converted into the soluble superphosphate. In order to effect this, one hundred pounds are treated with sixty-three pounds of oil of vitriol. The soluble superphosphate of lime is obtained, which product is generally employed for fertilizing lands.

The quantity of superphosphate of lime at the present day manufactured in England, the United States, France, and Germany, is said to be one thousand tons per day. This rate of production, at an average price of forty dollars per ton, would amount to the sum of fourteen millions of dollars per annum. It is now well known that the guano supply is gradually diminishing. We make no doubt that, with the increase of population and the extended cultivation of barren and worn-out soils, the demand for superphosphate of lime will reach at least twenty millions per annum. This shows the importance of utilizing nature's gifts to their fullest extent. The consumption of superphosphate of lime, in place of other substances used in the arts, is now comparatively small, but may, at no distant day, find a large application in the manufacture of phosphorus and phosphate of soda. A few years ago there was a good deal of inquiry made for phosphate of soda for the use of distillers, whose experiments proved that an addition of it would not alone accelerate the process of fermentation, but also produce an increase in the yield. Upon being applied for, the material could not be obtained. Some fine crystals of phosphate of soda were obtained from Canadian apatite; nor is there any reason why phosphorus, not yet manufactured in this country, but imported from Germany and France to the value of one hundred thousand dollars per annum, should not be obtained in this country from the native mineral. In the manufacture of phosphorus the mineral apatite is first converted into a superphosphate, then mixed with plenty of charcoal and volatilized at a high heat. Phosphorus is the resulting product. It is used in the manufacture of friction matches, and also for the extermination of vermin. The phosphoric nodules from the lower silurian rocks of Canada, and the coprolites found in the fossiliferous rocks, are all of organic origin, and contain phosphate of lime in various proportions ranging from fifteen to eighty-five per cent. These nodules contain frequently fragments of small shells; such sometimes present a spiral or other

form of interior structure derived from their animal organization. Coprolites were first noticed by BUCKLAND on the English coast, but are now found in many other localities. They are used solely in the making of superphosphate of lime; while apatite, containing a uniform percentage of phosphate of lime; bids fair to compete with the other substances already mentioned in the manufacture of the various chemical compounds.—*Manufacturer and Builder.*

A CROP OF BEETS.

Although the cultivation of roots for feeding cattle and sheep has entered so largely into the economy of English farmers, and has been recommended and urged by the leading agricultural journals of this country in the most persistent manner, it has as yet received but little attention from those for whose advantage all this advice is tendered. The reasons are obvious: First, the experience that most farmers have had in cultivating a few rows of carrots in a neglected garden, or in growing a "patch" of turnips, sown broadcast in an ill-prepared field, has discouraged them from attempting to raise a supply of roots sufficient to maintain their stock through our long and severe winters, with a less amount of hay and grain than would otherwise be necessary. Again, the large cellars (convenient to the stalls, and secure from our severe frosts), that are requisite for storing a desirable quantity, have to be built, and frequently a re-arrangement of barns and outbuildings must be made, that time and labor may be economized in feeding.

These improvements, although permanent, are expensive, and but few are found who consider the investment more profitable than government bonds.

For the encouragement of this small minority, I propose to show in as brief a manner as possible how a crop of roots can be secured, even at the present rates of farm labor, that will supply a greater amount of nutriment than can be produced at the same cost in any other form. After several years' experience with different varieties of roots, we have adopted the mangold-wurzel for our main crop, as yielding the largest returns with the least labor.— The soil preferred is a clay loam, and our method of cultivation is as follows: If the field designed for beets next season is in grass, it should be ploughed this fall as deep as the nature of the soil will admit. In the spring reduce it to as fine a tilth as possible, by the use of the harrow and roller. About the first of June, lay out deep furrows twenty-seven inches apart and apply fine manure, forty loads of thirty bushels each per acre; reverse the ridges, covering the manure and making a seed-bed three inches high. Or, if the land is in good condition, the manure may be spread upon the surface, and

after it is thoroughly incorporated with the soil, the ridges may be made with a horse-hoe, or light plough, and raked down by hand. We use Goslee's potato coverer, an implement specially adapted to the purpose.

If the seed is to be dibbled in, it should be sifted, and only the large, plump seeds used. We prefer to put in the seed with a drill, as by it we secure a more uniform stand. Harrington's drill is the best for beets. About eight pounds of seed are required per acre.

As soon as the plants are up, go through with a light horse-hoe, and when they are well rotted, thin to twelve inches. The succeeding labor can be done with the horse-hoe.

The crop must be kept free from weeds, to obtain satisfactory results.

In harvesting, the tops may be twisted off very rapidly by hand, without the aid of a knife. The roots can then be pulled up and thrown into heaps of about fifty bushels each. With a little covering, they remain here two or three weeks, if there is no danger of freezing.

We store them in the barn-cellars, in cribs five feet wide and eight feet high—the bottom and sides of the crib made of slats, three inches wide. In this manner, we keep them fresh and crisp until June. Our labor account the past season is as follows:

One half the value of 40 loads manure.....	\$40.00
Applying the manure,.....	20.00
Preparing the land and planting,.....	10.50
Cultivation,.....	26.00
Harvesting and storing in cellar,.....	24.00
Interest on land at 7 per cent,.....	14.00

The yield this season was but ordinary—1000 bushels per acre, or 60,000 lbs.

According to the best analyses and practical experiments, 400 lbs. of beets are equivalent to 100 lbs. of the best English hay, at \$25 per ton. One thousand bushels of beets have a value of \$187.50, thus giving not only a large amount of food, but a profit of \$53 per acre, and leaving the land in excellent condition for a succeeding crop.—MORGAN, in *Hearth and Home*.

CALIFORNIA FARMING.—The San Francisco papers complain that the yield of wheat in California has fallen from forty bushels an acre down to twenty bushels; and that, if the present improvident style of farming continues, the crops will not average over twelve bushels an acre. The old custom of burning the stubble and straw, instead of turning it into compost, has been revived. If the practice is not abandoned, the worn-out wheat fields of California, it is asserted, cannot be restored without great expense and the application of the best agricultural skill.

HOW TO MAKE SUPERPHOSPHATE AT HOME:

Intending to use a large quantity of bone manure (super-phosphate) in growing cotton and corn the coming year, I would be glad to know from you the best method of applying it. I have collected a large quantity of farm-yard manure, with which I am mixing the super-phosphate. The land I am working is the black cane-brake—lime predominating.—My plan for manufacturing the bone manure was as follows: I had the bones broken up by hand, into pieces the size of a hickory nut, using a hammer and anvil for that purpose—each hand breaking up about 100 pounds per day. I placed this hundred pounds in a coal oil barrel, with the head taken out, covered with water, and let stand three days. I then poured off as much of the water as possible; then poured on thirty-five pounds acid, previously mixed, with half its bulk of water; let it stand forty-eight hours, and emptied the resulting pasty mass into a wooden trough. The knuckle joints and back-bone being too hard to break, I burned them into ashes with hard wood, and added an equal quantity to that in the trough. In two days it was perfectly dry, and by constant stirring with a spade or hoe during the drying, I succeeded in making a very fine dry powder, superior to anything in the market. An answer will greatly oblige,

Respectfully yours, T. W. GILLESPIE.
Greensboro, Hale Co., Ala., Nov. 9, 1868.

[We have had recently a number of inquiries concerning the preparation of superphosphate. The above shows how this article may be manufactured at home, with such appliances as are within the reach of every one. The quantity of acid used is too small, (35 pounds to 200 pounds bones)—35 pounds acid to one hundred pounds bone is about the right ratio. The addition of ashes also, is objectionable, the potash in it tending to counteract the acid in its work of converting the insoluble bone phosphate into the soluble. Our friend has a very beautiful looking article, and also a very good one, but we doubt if his bones are as soluble as they might have been made had more acid been used. Mixing it, however, with farm yard manure tends to correct in a measure this want of solubility, and forms a most admirable compound. We doubt not that half the usual quantity of stable manure applied to one acre, combined with 200 pounds of the above prepared bones, will produce as much as a full dressing of the stable manure. It may be applied broadcast or in the drill, just like farm-yard manure by itself.—Super-phosphates, as a general rule, do not act as well on calcareous soils as on others—the lime, in them tending to convert the soluble back into the insoluble.]—*Eds. Southern Cultivator.*

From Prof. James Higgins' (late Maryland State Chemist,) Sixth Annual Report, we make the following extracts upon this subject:

Mode of Treatment and Quantity of Acid to be Used.

Without going into the reasons and showing the

calculations from which they were formed, I will here state that for every hundred pounds of bones to be acted on, about thirty-three pounds of sulphuric acid of specific gravity of 1.70 should be used; of course the quantity of commercial acid is to be increased when it is of less specific gravity. The bones should be finely ground and then moistened with water, after which the acid should be gradually added, and the mass thoroughly stirred. This is important to be attended to as otherwise a coating of sulphate of lime will form over the particles of bones and prevent the further action of the acid. They should be suffered to stand for ten days or a fortnight, be very frequently stirred, and then their superfluous moisture dried with saw dust, wheat chaff or any convenient substance except lime, for the reasons before given.

The handling of the sulphuric acid requires caution, as it will excoriate the skin or burn the clothes of those who handle it if it comes in contact with them. The best mode is to have a bent leaden tube or siphon, with a stop-cock at one end; this should be filled with water, the short end placed in the sulphuric acid, the long one with the stop-cock over the bones; the stop-cock is now to be turned, and the acid can in this manner be applied without any risk or danger to those using it. The proper quantity of dissolved bones, as near as I can know from all the information which I have upon the subject, is about five bushels to the acre, to be sown broadcast at the time of sowing or planting the crops.

* * * * *

The points here in reference to which I wish to call particular attention of the agriculturists, are:

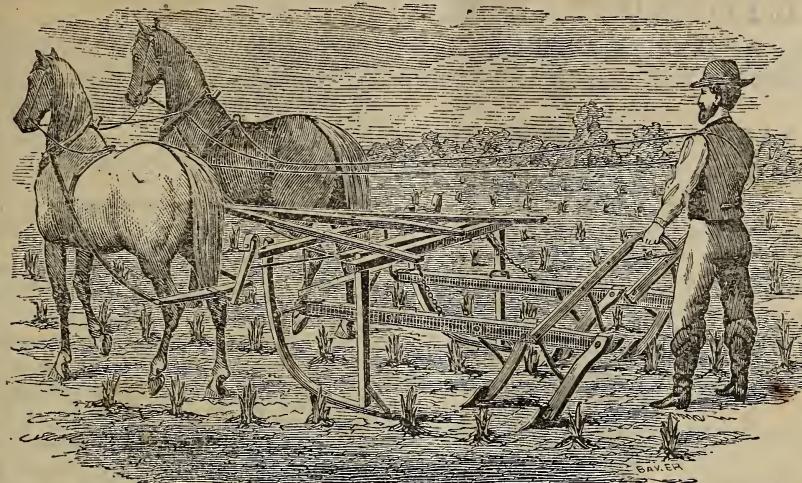
1. That bones should be used in their most soluble form—that is dissolved in sulphuric acid, as above directed.
2. In preparing the mixture the bones should be as fine as possible.
3. That the quality of the sulphuric acid employed should be well ascertained and paid for accordingly.
4. That lime, or substances containing much of this, should not be used to dry the mixture.
5. That they may be employed with benefit either at the time of sowing wheat or planting corn, or may be used as a top-dressing to wheat in the spring; and
6. That the purchaser should well ascertain the composition of this manure when bought, as it may and does vary from many causes.



CARBOLIC DISINFECTING SOAP.—There are many nostrums advertised, the chief constituent of which is nicotine in some form, for external application to domestic animals and to trees, for the removal of insects and the cure of certain diseases to which both are subject. Any one with even an elementary knowledge of chemistry must know that the best invention for this purpose is the Carbolic Soap made by Buchan & Co., of New York, for it is in accordance with the soundest philosophy.—*Turf, Field and Farm.*

It is difficult to tell colic from bots in a horse, but a tablespoonful of chloroform, in twice as much mucilage, is a good remedy for either.

WALKING CULTIVATOR.



The above machine is manufactured by Furst & Bradley, of Chicago, Illinois, and was exhibited at the recent Iowa State Agricultural Fair for 1868.—The committee on Implements at said Fair, say:—

"It claims all the facilities and merits of a sulky cultivator, except the convenience of riding. It is simple in construction, cheap, and within easy reach of all. Price \$30."

From the manufacturers' circular we extract the following: "It cultivates and finishes a row at the same time, and with our patent reversible shovels, the earth can be thrown either towards or from the corn. By using this Machine there will be no need for a hoe, and when desired it will hill up as perfect as can be done by hand.

When the plows are not connected they may be brought close together or spread apart so as to go around a hill of corn and take out the weed between them. The shovels can be set to any angle so as to throw more or less earth as may be desired.

As will be seen, we use runners instead of wheels. This enables us to make the machine lighter and with much less rigging than machines having wheels and having no parts to wear out. Using runners also enables us to couple the machine much shorter together and brings the draft close up to the end of the plow beams thereby causing it to draw lighter and is of great advantage in turning at the end of the field."

Carolina Farmer.—Every farmer should take at least one agricultural paper. Among the really good journals we receive is the *Carolina Farmer*, published monthly at Wilmington, N. C. by Wm. H. Bernard, at \$2 per year. The *Farmer* is not only a handsome work, but is filled with an unusual number of articles devoted to the interests of the planter and farmer.

Harford County Agricultural Society.

Pursuant to notice, a meeting for the purpose of organizing an Agricultural Society in Harford county, was held in Bel-Air, on Tuesday, January 5th, 1869, and organized by the election of Ramsey McHenry, Esq., as President, Cheyney Hoskins and Robert L. Morgan, Esqs., Vice-Presidents, and the appointment of Dr. Geo. Thos. Hays and J. M. Streett, as Secretaries.

Col. McHenry, upon taking the chair, thanked the meeting for the honor conferred upon him, spoke briefly of the advantages of an agricultural society, and urged the necessity of unity, vigor and zeal, combined with liberality, on the part of all interested, to secure the success of the society.

The *Aegis and Intelligencer*, of Bel-Air, in speaking of the organization of this society, and the great advantages to result from it to the county, says:

"Our county has certainly kept pace with any in the State in the improvement of its agricultural advantages. Lands have enhanced in value more rapidly than in most others, and its increased agricultural products justify the enhancement. We submit, that there can be no better plan devised to still further increase its prosperity, by inviting outside capital to be invested in its borders, and by stimulating and developing the energy already among us, than the organization of an agricultural society."

An adjourned meeting of the society will be held on the 10th of this month, when matters looking to its efficient organization will be discussed.

"The Land we Love."—This Southern monthly is received regularly, and still maintains its reputation.—It is worthy the support of our people. Edited by Gen. Hill, Charlotte, N. C.

THE
MARYLAND FARMER
AT \$1.50 PER ANNUM,
PUBLISHED ON THE 1ST OF EACH MONTH,
BY
S. SANDS MILLS & CO.
No. 24 South Calvert Street.
CORNER OF MERCER,
BALTIMORE.

S. SANDS MILLS, } PUBLISHERS AND PROPRIETORS.
E. WHITMAN,

BALTIMORE, FEBRUARY 1, 1869.

TERMS OF SUBSCRIPTION:

\$1.50 per annum, in advance—6 copies for \$7.50—10 copies \$12.00.

TERMS OF ADVERTISING.

1 Square of 10 lines or less, each insertion	\$1 50
1 Page 12 months	120 00
1 " 6 "	75 00
½ " 12 "	70 00
½ " 6 "	40 00
1 " Single insertion	20 00
Each subsequent insertion, not exceeding four	15 00
½ Page, single insertion	12 00
Each subsequent insertion, not exceeding four	8 00
Cards of 10 lines, yearly. \$12. Half yearly, \$7.	
Collections on yearly advertisements made quarterly, in ad-	
vance.	

RENEWALS FOR 1869.

We would again remind those of our readers, whose subscription commenced in January, that an early renewal is solicited—which can be done by enclosing us \$1.50. At the same time an effort might be made by each of our old subscribers to send us a new name for the year 1869.

IMPORTED JERSEY CATTLE.—Joseph H. Rieman, Esq., of Baltimore, has recently imported, direct from the Island, two fine Alderney Cows, one 2 and the other 4 years old. They were imported by the owner for breeding purposes, and are choice specimens of that popular breed.

IMPORTED DEVON BULL.—George Patterson, Esq., of Sykesville, in this State, has recently received from England, a fine Devon bull with which he intends to keep up his well known pure Devon Stock which is the finest in this country.

TO PREVENT WORMS IN PEACHES.—A correspondent at Richmond, Va., sends us the following :

When the fruit is about the size of marbles, move the earth from the tree about two feet around, and three inches deep and fill up with charcoal.

TANNERS' BARK.

A correspondent writes us as follows :

WARRENTON, N. C., Jan. 15, 1869.

Messrs. Editors:—I would like to hear from you through the columns of your most excellent paper, as to what use can be made of the bark from a tannery after it is thoroughly rotted? What crops is it best adapted to? Will it act on cotton without being composted with farm-yard and stable manure? Please notify me before my subscription is out and I will renew.

I am, yours, respectfully,

J. T. JONES.

ANSWER.

The same use can be made of tan bark as of any other fibrous substances when *thoroughly rotted*, but for the same reason that we would not use peat as a fertilizer by itself, neither would we use tan bark unmixed. It will act of course on cotton without being composted, but only feebly; so also on any other crop where the soil is deficient in earthy carbonates. Mixed with rich barn-yard manure in the proportions of three loads of tan to one of manure, and suffered to ferment, its value would be quadrupled. Except as a mulch to fruit trees, or as a covering to strawberry plants, tan bark in its undecomposed state cannot be used to advantage. Well rotted bark, such as our correspondent describes, is as valuable as almost any other fibrous material. But even in the compost heap, bark, when once impregnated with the nitrogenous gases given out during the process of fermentation, is not only a valuable addition to the compost heap, but in this half rotted state gives out slowly to the soil its soluble constituents.

We say then, that bark used fresh from the tannery, or at any time before it has undergone the rotting process, is of no service. When rotted the case is different, for an analysis of the ashes of oak bark shows that one hundred parts of its ashes contains :

Soluble Salts,	7
Earthy Phosphates,	3
Earthy Carbonates,	66
Silica,	1-5
Metallic Oxides	2

The earthy and saline ingredients therefore have valuable fertilizing properties; and where the bark is brought by fermentation to a condition suitable to be used by the growing plants, or where it has been reduced by fire to an ash, any field over which it is strewn will be greatly benefited by it. But tanners' bark undergoes putrefaction so slowly, even when fermented with barn-yard manure, that few farmers care to be troubled with it. Where, however, the fleshings and the refuse hair and lime can be added to and mixed with the tan, fermentation will reduce this stubborn material into one of the very best of manures. If nothing else can be done it can be broken down with caustic lime, and where the latter is easy to be had, and there is tan in

abundance, composting the rotting tan with layers of lime will be perhaps as good a way as any to render soluble the fertilizing constituents contained in the tan bark. Our correspondent will observe from the foregoing that tan bark must either be broken down through fermentation, or reduced to an ash before it can be brought into really beneficial use. We may also take it for granted that the neglect of this substance by farmers is susceptible of explanation—that explanation being the almost intolerable slowness with which tanners' bark undergoes putrefaction.—[Eds. *Maryland Farmer*.]

PEACH ON PERSIMON STOCK.

FAIRFIELD, Md., Dec. 25, 1868.

To the Editors of the *Maryland Farmer*:

As all are aware, the peach is a short lived tree. Some improvement has been made in its longevity by engrafting it on the plum stock, but that too has its enemies; we must look for a long lived hardy fruit with which to unite it. Now the persimmon (that pest of our fields) is both long lived and hardy, and cannot it be denominated a fruit? I think so—and I am quite sure that the sap of the peach and persimmon will unite; if so we have the thing that we in the South much need. I shall, and propose that some others at the proper time next spring, engraft a few peach on strong healthy persimmon stocks by way of experiment.

Yours, truly,
JAMES SCOFIELD.

The above letter was referred to Mr. Brackenridge for an answer, who furnished us with the following:

To the Editors of the *Maryland Farmer*:

I received your kind note enclosing the above letter addressed to you by your friend Mr. Scofield, regarding the adaptation of the Persimon, (*Diospyrus Virginiana*) of our States, as a stock on which to work the peach upon, and after giving it a careful consideration, have reluctantly come to the conclusion, reluctantly I say, for I would like very much that it could be adopted, but which, for the following reasons, I believe it never can:—It belongs to an order of plants—*Ebinaceæ*, which has no natural affinity with the order *Amygdalaceæ*, which embraces the Peach, the flowers in one being polygamous, while in the other they are hermaphrodite; it is true both have a pulpy fruit, that of the peach containing one seed, on the other hand the persimmon is only one seeded by abortion.

And farther, it is a very difficult task to get a bud to take on a persimmon, even when the bud used is from one of its own kind, owing to the amount of gum that exudes from the incision, which envelopes the bud, or throws it entirely out before a junction is formed; I once tried my hand in this way with the *Diospyrus Mabola* of the Phillipine Islands, which produces a large fine Persimon, but I confess a failure, for the reasons above given; by

the process of grafting, I have no doubt that a person may succeed in getting one Persimon to grow upon another. In conclusion, I would say, that in order to prolong the life of our Peach trees we will have to look for some other stock than the Persimon, on which to work it.

W. D. BRACKENRIDGE.

Govanstown, Jan. 18, 1869.

PLENTY OF MONEY IN GEORGIA.

Under this heading the N. Y. Herald quotes from the Rome (Ga.) *Courier*, as follows:

"Hundreds of planters in this and adjoining counties have now in hand from \$1000 to 5000, and feel sort of good over it, but really not knowing what to do with their money."

This is in the country and among the people left desolate and impoverished in the track of Sherman's march to the sea, but a few years ago, and confirms the statement of our correspondent "Traveller" (see his article on Cherokee Georgia, in this number) viz: "That a man can make \$3 to \$5 by farming in Cherokee Georgia, with less labor and in less time than he can make one in the North West."

A gentleman from Macon, Ga., states as the result of this influx of money, that the price of real estate has rapidly advanced, and in Cherokee Georgia the advance has been at least 200 per cent. in the last 60 days.

Old Plaster from Walls of Houses.

BOYKINS DEPOT, VA., Jan. 16, 1869.

To the Editors of the *Maryland Farmer*:

* * * * While writing I will take occasion to give you what I deem a correct answer to a query propounded to you some months since from this office. Your correspondent wished to know why it was that plastering from walls of houses produced such marked effects on crops, when lime alone did not. You replied you doubted whether it did, speaking theoretically. It certainly does, Mr. Editor, and I believe the true solution of the question is just this. When plastering is carried to the fields and thrown out in heaps it is spread around in much larger quantities than the usual dusting the land with lime.

Yours, truly,
G. N. MUSGRAVE.

Oporto Grape.

BALTIMORE, January 25th, 1869.

To the Editors of the *Maryland Farmer*:

The newspapers of this city contain notices and advertisements of *Speer's Port Grape Wine*, grown in New Jersey. Can you not obtain from Mr. Speer, for the information of your readers, a description of his vineyard and mode of cultivation, together with some account of Oporto grape, from which the wine is said to be made.

G.

NOTES AND COMMENTARIES.

BY PATUXENT PLANTER.

Although we live in a progressive age we often do, and might much oftener, if we would, pick up stray bits of practical wisdom, and good hints for the improvement of our daily condition from the past, and those who lived in the far, long past. I therefore make the following extract from the journal of the famous William Cobbett, which he wrote while in this country, and dated

January 4, 1818. A frost that makes us jump and skip about like larks. Very seasonable for a sluggish fellow. Prepared for winter. Patched up a boarded building, which was formerly a coach-house; but which is not so necessary to me, in that capacity, as in that of a *fowl house*. The neighbours tell me, that the poultry will roost out upon the trees all the winter, which, the weather being so dry in winter, is very likely; and, indeed, they must, if they have no house, which is almost universally the case. However, I mean to give the poor things a choice. I have lined the said coach-house with corn stalks and leaves of trees, and have tacked up cedar boughs to the lining to the boards, and have laid a bed of leaves a foot thick all over the floor. I have secured all against dogs, and have made ladders for the fowls to go in at holes six feet from the ground. I have made pigstytes, lined round with cedar boughs and well covered. A sheep yard, for a score of ewes to have lambs in spring, surrounded with a hedge of cedar boughs, and with a shed for the ewes to lie under, if they like. The oxen and cows are tied up in a stall. The dogs have a place, well covered, and lined with corn stalks and leaves.—And now, I can, without anxiety, sit by the fire, or lie in bed, and hear the north wester whistle.

These are certainly good hints for Maryland farmer's and Maryland farmer's wives. It shows how easily and at what small expense a comfortable house can be prepared for poultry, and shelters for colts, calves and sheep and hogs, by all persons who have cedar or pine on their farms, or who can purchase such cheap material. Lumber and carpenter's work are both very high just now and consequently many farmer's will not incur the expense of erecting costly shelters and houses to keep warm and dry their poultry and stock. Let such avail themselves of the hints set forth by old Cobbett. For a few favorite sheep or ewes having early lambs, a few huts or hovels on bare hill sides are very grateful to the sheep, or colts, or calves, and enrich the spots on which they are placed. These hovels are made of stakes eight feet high and driven in the ground two feet, and closely wattled with cedar or pine brush. They may be eight feet wide at one end, and twelve feet long or longer, built somewhat wedge shaped, coming to a point four feet wide, which could be closed by a door or bars, or left open at option. About one-half could be closed on top by laying poles across, and brush, straw or corn

fodder put over to keep off rain and snow. Inside a small rack or trough to be placed, where hay or grain could be given at discretion. Leaves should be put under it, or straw, to keep a dry bedding.—They are quickly built and one such would accomodate two or three colts, or calves, or a dozen ewes with their lambs. Such places are far warmer than large, high, open tobacco house sheds. I have seen them used with great effect, and a quarter of an acre of barren hill side made the most productive spot in the fields in one winter by such a hut wherein were kept twelve sheep. After a few nights and one or two stormy days they were never confined, but always resorted at night or in a storm to this warm shelter. In just such a shelter only a foot or so higher at the upper end, the late venerable Judge Duvall reared the famous horse Argyle with his dam, the first winter, and in the spring he was in such fine plight and so promising he was sold to Col. Pierce Butler, of South Carolina, for \$600—a large price for a yearling in those days.

Process of Preserving Wood.—Much attention has been excited among scientific men and practical mechanics, of late, in regard to the Robbin's method of preserving wood, especially in reference to wood used in manufacturing farm implements and all kinds of vehicles. The whole process seems to be that “the moisture and albuminous matter in the wood is expelled and replaced by oleaginous and creosotic matter driven into the curing chamber in the state of hot vapor from a suitable generating retort.” From all that has been seen and spoken of this great discovery, there is no doubt millions of dollars will be saved the country when it becomes in general use. At the present, and in the past, such has been the demand for implements and vehicles in this country that it was impossible to have properly seasoned wood for the purpose of supply. The annual losses to the farmers from that cause has been incalculable. The want of durability in these articles has greatly increased the demand, and thereby kept up to a large extent the high prices of such things as are necessary for the purposes of daily use, and without which the farmer could not carry on his farm operations.

Liquid Glue.—Crack up the glue and put it in a bottle; add to it common whiskey, shake up, cork tight, and in three or four days it can be used. It requires no heating, will keep for almost any length of time, and is at all times ready for use, except in the coldest of weather, when it will need warming. The bottle must be kept tight, so that the whisky will not evaporate. A common cork should not be used; it will become clogged. Use a tin stopper, covering the neck of the bottle, and fitting as closely as possible.

BUREAU OF LABOR AND AGRICULTURE.

We have received the following communication from Major Giddings, Assistant in the Department of Labor and Agriculture, in reply to an enquiry touching the operations and prospects of the Department of Labor and Agriculture.

DEPARTMENT OF LABOR AND AGRICULTURE
OF THE STATE OF MARYLAND,
Baltimore, Jun. 15, 1869.

To the Editors of the Maryland Farmer:

As this office, designed to promote the development of our agricultural and other resources, has received your cordial support, and also (as I am pleased to acknowledge) a just consideration from the press representing all interests in the State, I take pleasure in giving you the information asked for, omitting details which would properly appear in an official report. And, first, in relation to immigration. This office was opened in April; an agent was sent to Bremen in May, and one was employed at Liverpool, who entered upon his duties on the first of August. The German agent was employed for six months in distributing pamphlets and visiting vessels about to sail with emigrants from Bremen. The influence of the pamphlets we hope to realize in the present year; and his personal intercourse with emigrants on the eve of their embarkation has doubtless aided the home office to retain in the State, as it has, about 18 per cent. of the Germans arriving at this port. It is regretted that the fund placed at the disposal of this Department will not sustain continuous and more extensive labor in Germany, from which there is now so large an emigration of substantial farmers—increased in the minor States, as we are informed, by their enforced annexation to Prussia.

But with the experience of the past year, we hope now to direct our efforts more effectively, both at home and abroad. In view of the difficulties we have encountered in caring properly for the immigrants after their arrival, and during the brief detention that must necessarily occur before they can go forward to the homes and occupation selected by them, we have decided to establish a depot or lodging house at Fell's Point, to be in charge of one of our agents, and to which all passengers who wish to remain in the State can go with their baggage and obtain all the accommodations requisite after their weary ocean travel.

The house will be large enough to afford separate apartments for all the families likely to land from a single ship. Baths, gas and other conveniences will be furnished by us, and the agent in charge will be allowed to make reasonable charges for meals, &c., the rates to be placarded in the building. In this way the emigrant will avoid extortion, learn to confide in us, and will not have to go out to our far-

mers leaving his bed and baggage behind him, as is now so often the case.

Our book records the arrival of 10,805 passengers since April; of whom 1,843 have remained. During the current year we look for an immigration of 20,000, and hope one-fourth of them will be induced to settle in Maryland. You can assure your readers that their requisitions upon this office will be carefully attended to, and their applications should be forwarded, if possible, before the spring immigration. If some of our land owners would prepare at once for the reception of small colonies of laborers—to work their land *on shares*—they will receive our earnest co-operation; and I am confident we shall be able to supply a large number of industrious families, who, if provided with land and tools, will amply recompense the proprietors of the soil.

Our Liverpool agent has labored faithfully, but as yet the results have not been commensurate to his exertions, and this chiefly because of the competition of the English colonies, and the frequent and cheap communication between that port and New York. It is hoped that the vast increase in our cotton and other Southern trade may soon lead to the establishment of a line of first-class steamers to Liverpool, otherwise it is supposed that our agent at that port might be advantageously transferred to New York. However, we believe that his efforts in behalf of the State have elicited the attention of many intending to emigrate from the United Kingdom. In the last quarter he has written 560 letters besides answering hundreds of personal applications for information concerning Maryland.

The second duty of this Department is the supervision of the State inspectors, and it is performed, with the exception of the inspection of artificial fertilizers, the law for which failed to take effect from the omission (at its engrossment) of an important section. The abolition of our entire inspection system is strongly urged by some persons, because it yields little or no revenue over and above the inspectors salaries, and, as they allege, furnishes no better guarantee of the article inspected than would the name of the grower or manufacturer. As to the first objection, it should have no weight, provided the inspections are honestly made, since the purpose is not to swell the public revenue, but to throw such safeguards around our commerce as will encourage its growth within the State, and this security should be provided at the least possible expense. And may we not suppose that a cargo of Maryland tobacco in the port of Bremen, or of Baltimore flour at Rio Janeiro, is enhanced in value if, in addition to the names of the manufacturers, it bears the brand of our State Inspectors. Abuses may at times attend the service (and it is hoped that when they occur they will be promptly reported at this office,) but the system seems to be founded on sound policy.

This Department is also charged with the care of the public buildings; but though many of them were much dilapidated, the sum of \$5,000 only was appropriated, and that for a specific object, viz: for the construction of an auction room for the sale of tobacco, and for the most essential repairs of certain warehouses. This branch of affairs has long needed supervision, not only for the application of timely repairs to the public property, but to guard against the misappropriation of the public funds. There is now a building in this city which was erected by the State two years ago, and which has not been opened or used since the keys were received from the hands of the builder, and this simply because the business for which it was designed does not exist at the place in which it is situated.

The last, but not the least, important duty of this office is to inquire into our resources within the Chesapeake Bay, and to suggest plans for making them available as sources of revenue. This duty has not been neglected, but additional legislation is required to secure accuracy and dispatch in the work. Our object has been to ascertain as nearly as possible the extent of our oyster trade and also of the beds, together with such facts in relation to the growth, &c., of these valuable deposits as would enable the department to recommend measures as well for the development as the preservation of these fisheries. From such information as we have been able to obtain since the beginning of the present oyster season (September 1st,) it appears that not less than twelve millions of bushels are annually taken from our waters. The State Police Force has been so constantly occupied in cruising that it has thus far been unable to make the investigations desired by this office; but after the oyster season, and throughout the coming summer, the inquiries and necessary surveys will be vigorously prosecuted, and the result reported to the next General Assembly. The commanding officer, who has already displayed great energy and ability in the execution of his responsible duties, is eminently qualified for the work proposed, and his report will doubtless be very interesting and suggestive. Apart however from the service it is expected to render this department, the necessity for such a Police Force on the Bay is demonstrated by the fact that, while already a hundred more licenses have been issued than were taken out last year, not a week passes in which several arrests are not made for infractions of the law.—But though the revenue derived from this source, viz. from licenses, fines, &c., will probably be much increased over that of previous years, yet this great and long neglected mine of wealth will not contribute as it should to the public fisc until the tax per bushel is imposed. The State should obtain a fair profit from the valuable products of its domain, and the demand for which is annually increasing throughout the Union.

L. GIDDINGS.

POTATOES HYBRIDIZING.

WEST RIVER, Jan. 22, 1869.

To the Editors of the Maryland Farmer:

Gentlemen:—You will find enclosed the amount of my subscription for the *Maryland Farmer* for the present year. I read it with increased interest, and I regard it as a most valuable publication not only for the farmer and gardener, but for the general reader. It is truly a domestic paper, and ought to be in every country family.

Having heard it frequently and very positively stated, although it seemed to me unphilosophical and unreasonable, that different kinds of Potatoes placed near each other would mix or hybridize, I wrote to Mr. Fearing Burr, author of that most valuable and satisfactory work, "The Field and Garden Vegetables of America," on the subject. I have received from him the following reply, which I send to you for publication. Although it is a private letter, yet as it possesses a public interest, I hope there is no indelicacy in doing so.

Your obedient servant,
GEORGE W. HUGHES.

HINCHAM CENTRE, MASS. Jan. 1st, 1869.

GEORGE W. HUGHES, Esq.

Dear Sir:—In reply to your favor of 23d ult. I would say that I do not think that varieties of Potatoes will intermix or hybridize from being cultivated in the same hill. For instance, should the "Early Rose" and "Harrison" be planted in the same hill, I think that the product of each would be true to the parent tuber. I am aware that an opposite opinion is entertained by a few, but I must confess that in a large experience, extending over more than thirty years, during which I have personally grown most of the prominent foreign as well as American sorts, I have never detected any indications of intermixture. Planted in drills, often with nothing but a stake to mark the division between the various kinds, I have always found the tubers true. I would not say the thing is impossible, but I do say, that no variety has ever come under my observation that was claimed as being thus originated. If any such exists I would be pleased to see and test it.

The hybridizing of a flower in my opinion would no more affect the tubers or general character of the parent plant, than would the same process change the nature of a grape vine thus treated. Because a few blossoms of a Catawba vine should be fertilized by the pollen from an "Allen's Hybrid," no one would certainly expect to find, as a consequence, the vine to produce other than Catawba grapes, and the same is true of the potato. The intermixture affects only the seeds, and through these I think I may say, only are the new sorts obtained. Yours, truly,

FEARING BURR.

CHEROKEE GEORGIA.

To the Editors of the Maryland Farmer:

Your August number contained a letter from Mr. Dent, of Cave Spring, Ga., calling attention in general terms to the advantages of Cherokee Georgia. Since then I have collected more specific and detailed information, which will doubtless be of interest to your readers.

Before railroads supplied the place of water transportation, the settlements followed and clung to the Atlantic coast and the rivers of the west, leaving what is known as Cherokee Georgia—for soil, climate and health the most attractive portion of this country—in the possession of the Indians, until a comparatively very recent period. The discovery of gold about Dahlonega caused the State of Georgia to insist upon the removal of the Cherokees. The State then surveyed and laid off the lands in 160 acre lots and distributed them among her citizens by lottery. Experienced California miners say that with the late improvements in the art and machinery of mining, the cheaper wages, easier access and less costly transportation, gold mining in Cherokee Georgia now pays better than in California. But from the then lack of this machinery and art, the gold fever soon died out in Georgia. The drawers of the Cherokee lands, living principally near the sea-coast and "well to do" at home, attached little value to lands lying so far inland and accessible only by bad dirt roads. It was not until 1850 that the Western and Atlantic Railroad, or the State road, as it is called, because built and owned by the State of Georgia, penetrated those rich and productive valleys; and it was not until 1858 that the completion of the Memphis and Charleston Railroad, the Nashville and Chattanooga Railroad and the East Tennessee and Virginia links of railroad began to attract attention to that beautiful country. Even then there was little or no emigration in that direction from the North or from Europe, whilst the movement of the native population of the State had settled into grooves, from which it could not be immediately turned. As soon as a young man grew up in Lower Georgia, if he had negroes, he moved to the Southwest—Alabama, Mississippi, Louisiana, Texas—with the idea of raising cotton. If he had no negroes, since 1848 he was attracted by the gold fever to the Pacific, or to the Northwest by the rapid growth of Chicago, Milwaukee, Detroit and other Northwestern towns. Nevertheless, the following comparison of the census of 1850 and 1860 shows a very rapid increase in the production of Cherokee Georgia, nearly the whole increase being in the last three or four years of the decade. In what is now Cass, Catoosa, Chattooga, Dade, Floyd, Gordon, Murray, Whitfield and Walker counties, the population and products were relatively as follows:

	<i>Population.</i>	<i>Bus. Wheat.</i>	<i>Bus. Corn.</i>
	1850.	1860.	1850.
63,466	87,593	113,991	2,377,385
		583,305	3,091,528
		<i>Bales of Cotton.</i>	
		1850.	1860.
		6,746	21,202

Since the war Cherokee Georgia has been gaining rapidly in population, but chiefly at the expense of the middle, southwestern and coast sections of the State. A recent letter from Augusta, Georgia, says: "*I am a practical mechanic, desiring to move to North Georgia to live,*" and would "be pleased to start a foundry." The words in Italics express the general feeling prevailing in lower Georgia, prompted partly by a desire to get away from the crowd of negroes, and partly by the attractions of a richer soil and healthier climate.

A letter from Dalton, Ga., dated 12th January, says: "Not a dwelling-house in town to be had—all full, and many of them have two families in one house. Many new families are coming here as soon as they can get a place to shelter them."

In a very few years the current of population, which was formerly from lower Georgia to the southwest and northwest, will flow back to Cherokee Georgia. Its advantages are:

- 1st. A healthier and softer climate.
- 2d. A richer and more productive soil.
- 3d. A greater variety of products; it is far enough north to raise as much and better wheat to the acre that can be raised in the northwest, and it is far enough South for cotton.

4th. It is nearer to market.
5th. In Cherokee Georgia stock must be fed from 6 to 8 weeks, in the northwest from 6 to 8 months.

Finally, with all these advantages, a man can make three dollars or more by farming in North Georgia in less time and with less labor than he can make one in the northwest. I have other interesting facts, as to the agricultural and forest productions of North Georgia, but not to make this too long, I must reserve them for another communication.

TRAVELER.

CALCINED BONES.—A correspondent of the Canada *Farmer* asks concerning the manurial value of calcined bones. The editor replies that bone, in any form, impart increased productiveness to land,—but are especially effective on the sandy or lighter soils. Calcined bones absorb, with avidity, air and water, by which the phosphate of lime, amounting to some seventy-five per cent. of the bones, is rendered soluble and easily appropriated as food by the plants. Burnt bones are deemed especially valuable to turnips, and scarcely less so to the cereals.

Put a few live fish into wells, if *angle worms* infest them.

THE GROWING OF WHITE BEANS.

To the Editors of the Maryland Farmer:

I am not a book farmer, but having had some experience in farming in the last fifty years, I will answer some of your inquiries in regard to the growing of beans.

Forty years ago the demand for beans was quite limited, and they were only grown in a small way, and it was seldom any farmer raised more than five to ten bushels, which were generally consumed at home, as the market price was only about one dollar per bushel.

The price, however, was not the reason that larger crops were not grown. There was really no demand for them. For many years past there has been an increasing demand for them, and the supply has not been equal to the demand, and the result has been that at times very exorbitant prices have been realized.

Within the past year the navy or pea bean has sold at from four to five dollars per bushel.

It has been often asked what is the best kind of white beans to plant, and this is a question all growers will soon learn when they raise them for market, when they will find that experienced buyers generally want the pure navy or pea bean, and the nearer to pea shape (*i. e.* round) the better they will sell. It is sometimes difficult to obtain the pure pea bean, as Peas are often badly mixed, but when that is the case they are easily detected, and if the seed is not pure the crop of course cannot be so. Pure seed will be nearly all of one shape, and if any of the long white beans are found in it they should be picked out. With pure seed the crop will be pure, and necessarily command the highest price.

The pure navy or pea bean is small in size and easy of cultivation, as they will grow in almost any soil. I have grown them on gravelly and sandy soils (so poor that corn or potatoes would not grow on it to pay,) and raised a fair crop, but they do best in a light loam. If the ground is too rich they will run too much to vines.

My method of planting has been in rows three feet apart, and if the ground is in good condition, in hills 18 inches apart in the rows, with five beans to each hill; but if the ground is thin and poor I planted them in drills instead of hills, and cultivate same as corn, except never to plow or hoe them early in the morning or after a rain until the vines have become entirely dry, as it does not answer to work them when wet. They are like most other vegetables, the better they are cultivated the better they will yield.

The time for planting is about the same as for corn, although they will mature in less time and can be planted two or three weeks later and do well. I have planted them with corn, dropping the beans

about three inches from the corn, so that there was no extra labor in covering or hoeing, and with very good success with both crops. I could not see that the beans injured the corn in any way, but the growth of the beans was not as good as when planted alone. I have seen farmers plant corn with a running bean, to run up the stalks, but I think this is a mistake, as it is an injury to the corn and troublesome to harvest.

The navy bean is not a runner, and in harvesting they are pulled up by the roots before they are dry enough to shell by handling, and after drying sufficient to shell easily, thresh them with flails and pass them through a Montgomery Wheat Fan and they will be ready for market.

The split and waste beans are excellent food for sheep, and the vines are of no use except for the manure heap.

I have hastily given you some of my views and experience in bean culture, and would be glad to hear from others on this subject, as I intend to continue the growing of beans and want all the information I can get on the subject.

Yours, truly, "Ivy."

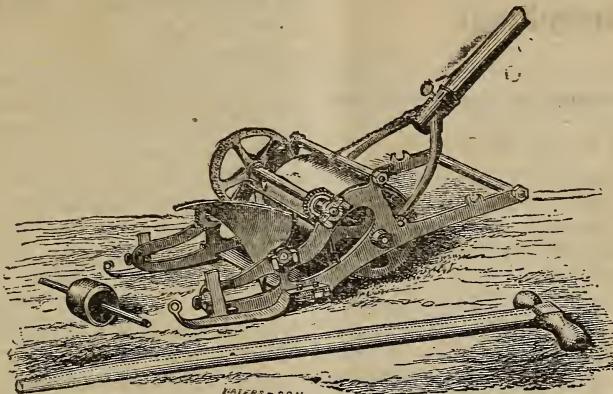
Cheap Wash for Buildings.

Take a clean, water-tight cask and put into it half a bushel of lime. Slack it by pouring water over it boiling hot, and in sufficient quantity to cover it five inches deep, and stir it briskly till thoroughly slackened. When the lime has been slackened, dissolve it in water, and add two pounds of sulphate of zinc and one of common salt. These will cause the wash to harden and prevent its cracking, which gives an unseemly appearance to the work. A beautiful cream color may be given to the wash by adding three pounds of yellow ochre; or a good pearl or lead color by the addition of a lump of iron black. For fawn color add four pounds umber, one pound of Indian red, and one pound common lamp black. For stone color add two pounds raw umber and two pounds lamp black. When applied to the outside of houses and to fences, it is rendered more durable by adding about a pint of sweet milk to a gallon of wash.—*Scientific American.*

DEATH OF C. N. BEMENT.—We regret to learn of the death of C. N. Bement, Esq., the well-known authority upon poultry matters, author of "The Poulterers' Companion," and contributor to many of the agricultural periodicals of the country. His demise took place at his residence at Poughkeepsie, New York, Dec. 22d. He was in the 78th year of his age.

The potato is a great absorber of potash. Therefore wood ashes are a good manure for it.

HILL'S LAWN MOWING MACHINE.



This is a small, light, hand machine, for mowing lawns and grass plots. It is pushed forward by a handle with a cross-head, and moves on a roller.

The spiral cutter is rapidly revolved by means of the gears, cutting the grass very evenly and rapidly and leaves a smooth, close-shaved turf.

It cuts the grass with less labor and time, and much more perfectly than it can be cut by lawn scythes.

The Caster-Roller is to be used when mowing borders. When not in use it can be carried on the rear end of the machine. The grass can be cut very close to shrubs and trees with the roller out.

By the action of the blades, the cut grass is scattered evenly over the ground. This acts as a mulch to protect the grass from too much heat, and improves the sod by its decay.

The height of cut is regulated by adjusting the shoes, and the handle is adjustable to different heights by the chain hook.

The grass should be cut as often as once a week, as the frequent cutting causes the grass to grow thick and fine, and retains its fresh color.

The draft is very light when the grass is not allowed to grow too long before cutting.

This machine cuts 14 inches wide, and weighs 65 pounds.

DIGGING POTATOES.—The *Ohio Farmer* says the most rapid potato digging he ever witnessed was done with a common barn shovel. The shovel was driven into the earth beside and under the hill, and a portion lifted out, and by a quick jerk scattered over the surface, entirely separating soil and vegetables, leaving the potatoes clean. Generally two applications of the shovel finished the work upon a hill.

Rich milk is not the best for calves. A butter cow is not a good stock cow.

PHYSICAL SURVEY OF VIRGINIA.—(Preliminary Report.) By M. F. Maury, J. L. D., &c., Professor of Physics, Virginia Military Institute. Richmond, 1868.

Like everything which comes from the pen of Captain Maury, this report is well worthy of close and attentive perusal. It is, as its title acknowledges, preliminary, being the first of a series of reports upon the advantages and resources of Virginia, commercial, geographical, agricultural and geological. This task has been undertaken by the Professors of the Military Institute at Lexington, and if carried out as it bids fair to be, it will add still another to the many benefits which that school has conferred on the State. The present report is devoted to the consideration of the geographical position of Virginia. It shows how much nearer Norfolk is to the great producing regions of the West than is New York, and also how much more accessible by reason of superiority of climate. It sets forth also the military advantages of the Chesapeake, and calls attention to the fact that it is nearer the heart of Europe as well as the heart of America. It is an able plea for the line through Virginia in preference to the Northern routes, and especially over that so urgently recommended by some Northern capitalists, the ship canal around the Falls of Niagara. The Baltimore and Ohio Road is rated as one of the tributaries of Norfolk, but should a ship canal be cut through the Eastern Shore and Delaware, perhaps Baltimore might use her own road for her own benefit. We think he underrates the capacity of Baltimore for vessels which he limits to 16 feet draft. We ourselves have seen ships drawing 20 feet lying at our lower wharves. There is another point to be taken into consideration. Commerce always seeks the highest point accessible to large vessels, because that being nearer to the producing interior, sends out its products with the shortest land carriage, which is so much more expensive than water transportation. Hence, even if Norfolk gets her lines, which we hope she may, ships will continue to come to Baltimore as nearer the great centres of production. For the same reason vessels pass Norfolk and Petersburg and go to Richmond.

Vick's Illustrated Catalogue and Floral Guide for 1869.—It contains accurate descriptions of flowers and vegetables, together with practical hints and instructions on their culture, and is numerously illustrated with elegant engravings. This is the most attractive catalogue issued in the United States, and we would advise our readers to send ten cents to James Vick, Rochester, New York, and secure a copy. See his advertisement.

Horticultural.

ADVICE TO BEGINNERS IN FRUIT CULTURE.

BY A. S. FULLER.

I am in constant receipt of letters asking advice in regard to fruit culture. These requests come mainly from young men who wish to engage in the business, but who have little or no capital to begin with. Many of them appear to think that to secure a fortune it is only necessary to secure a piece of land and plant it with fruit trees or bushes. But, as this is a very erroneous view of the subject; I take this opportunity to point out some of the difficulties which every successful fruit grower has had to overcome before he has been able to make the business pay a profit upon the investment.

The first thing to be decided, after procuring the land upon which to grow the fruit, is what varieties are best adapted to the location and soil. We all have our preferences in regard to kinds; and we may desire to cultivate none but the very best in quality, or those of large size. But in fruit culture climate and soil are very often all powerful; and we are compelled to grow what we can, and not what we most desire. It is just here that we find the great stumbling block of pomology.—Hundreds of men have gone into fruit culture with more enthusiasm than wisdom. Consequently, they had no time to seek advice, nor to consider whether certain varieties or species were adapted to their location or not; but they planted largely of everything that was known to be good. Now, is it any wonder that such men fail in making fruit culture a profitable business? They certainly would not succeed in any other employment if they were to adopt a similar system. It is quite probable that the principal reason why beginners in fruit culture make so many blunders is that they start out with the idea that it requires but very ordinary skill to accomplish the greatest feats ever performed in horticultural science; the acorn becomes an oak without the aid of man; the wild grapevine climbs the tall tree, and this produces fruit, although never pruned or cultivated. Then why should we talk so much about the science and practice of horticulture, when it is all so very natural? Almost every novice in fruit culture takes this view of the subject; and I regret to say that there are a few men having some experience who do much toward leading beginners into the same path by recommending little or no cultivation, forgetting that nature has one aim in producing her fruits, and mankind, usually, quite another. Now, my advice on this point is, never think of planting anything that is

not worthy of the best care. But the question may be asked, how is one to know what kinds are worth cultivation until they have been tried? Of course, it is only by experience that we can determine the value of the different varieties. Still it is not necessary for every man to make separate experiments for the purpose of deciding upon the value of particular kinds of fruits; for, if it were so, then we should make very slow progress.

A man who is about engaging in fruit culture should read a few of the best works to be found on the subject. This will give him a general idea of the business. He should then make up his mind as to what one or more families of plants he will cultivate. But, before this decision is made, it is well to know whether his soil or location is well adapted to the cultivation of these kinds; for it must not be forgotten that one section of the country, without any regard to soil, is often better suited to certain kinds of fruit than another. In the older States a man need not go astray; for the experience of our older horticulturist is a pretty safe guide.—For instance, if a young man has made up his mind to make grapes a specialty, he should then visit some of the most successful grape regions of the country, and examine the soil, location, varieties, and the mode of culture; and then judge for himself whether his own location or soil is a favorable one or otherwise. If he be desirous of growing the different kinds of small fruit, let him adopt the same plan, visiting the nearest fruit grower, and learn from him which are the most profitable varieties.

There may be men who will recommend certain varieties, because they have plants of the same to dispose of; therefore, I would say, go and see the plants when in fruit, and satisfy yourself as to their value, before purchasing. A man had better travel a thousand miles, if by doing so he can decide as to the value of a fruit which he desires to cultivate extensively.

There is another point worthy of some consideration, which is, whether it is best to cultivate several varieties or only the best one. It is an old adage that, if a man has several irons in the fire, some of them are likely to burn. But, if we have only one iron, and that burns, our occupation is gone. I believe it better to make a specialty of certain kinds; but not to trust all upon one. If we grow nothing but pears, and a late spring frost kills the flowers, our income, for that season, is gone; but the expense of cultivation is the same, whether the trees produce fruit or not. It is just the same with other kinds of fruit. But it is seldom that all fail in any one season. I have known strawberries to be entirely destroyed, while raspberries and blackberries were uninjured. This season blackberries are exceedingly scarce, but strawberries were abundant,

Consequently, the man who has both is on the safe side.

In cultivating the small fruits, I believe it to be the best policy to make the division about equal between the strawberry, raspberry and blackberry, as a general rule.

Early strawberries are sometimes killed by late spring frosts. Therefore, one should have at least one early and one late variety. When the strawberry is past, the black raspberry should succeed it. This is always a safe crop, and as a general thing always pays a handsome profit. There are also early and late varieties of this berry; but the grower must decide for himself which one is most desirable, for markets differ. In some instances they are in greater demand at one time than another. The red raspberry and blackberry follow close upon the former, thus giving a succession for nearly or quite three months. Now, the same boxes, baskets and crates used for one of these berries may be used for all; and, by growing several kinds, we are enabled to keep the capital invested in the marketing apparatus constantly employed for several months, instead of a few days, as would be the case if only one kind were cultivated.

Besides the above-named advantages, a less number of hands are required to take care of a certain number of acres when occupied with several varieties than when but one is grown. It will require the same number of days' work in the season, but distributed over a longer period of time. A man may be able to obtain ten hands at one time, but not twenty; and it is well for a fruit grower never to place his property at the pleasure or mercy of hired help. I have always observed that the man who so arranged his plans that he was sure of a steady income was far more likely to get rich than the one who was on the lookout for large sums at one time; and this is the principal reason why I advise beginners in fruit culture to grow a few of the best known varieties and cultivate them well.

American Horticultural Annual for 1869.—Through Henry Taylor & Co., Baltimore, we have received this Annual for 1869. It contains a calendar for each month in the year of the work to be done in the Orchard, Garden, &c., together with a description of all the new fruits, flowers, &c., for the year 1868—with numerous illustrations. It is well worth ten times its cost, and we recommend it to all interested in horticulture. Price 50 cents. Published by Orange Judd & Co., New York.

The American Agricultural Annual for 1869.—This is a farmer's year book, exhibiting recent progress in Agricultural theory and practice, and a guide to present and future labors. It is a very valuable Annual, and every farmer should secure a copy, which can be done by sending 50 cents to Henry Taylor & Co., Baltimore, or the publishers, Orange Judd & Co., New York.

The florist.

FOR THE MARYLAND FARMER.

FLORICULTURE—February, 1869.

With no slackened zeal, should the florist rest supinely waiting for the warm days of spring to rouse him from his lethargy—he or she should be up and doing, in devising improvements to be commenced so soon as the frosts are out of the ground, as well as such designs as may project into the summer; also obtaining from the seedsman, or procure from some good friend, seeds of such new or favorite flowers as may have attracted attention the by-gone summer; for a true lover of flora, longs to possess, at any cost, a portion of all those gems by which his taste in that way may have become captivated; and when such people ask for a cutting, or slips of some of your favorites they are often ready to add, as did the Irishman to a certain gardener, "Oh sur, if you're about to give me the cutting, please let there be a root at it." No one, surely, can well find fault with the round about way such individuals take to have their tastes gratified; and although it is deemed fashionable at the present day for persons to say that they love flowers, yet the class we have now in our eye, love them for the flowers themselves, and the gratification derived, delighting to cultivate and discant on the fair offspring of God's creation, and are found to be ready made friends of all such, who, like themselves have espoused flora's cause; in truth, we have always found that the friendship of the one who so loves is worth the cultivating, being genuine and refined; therefore we say, cultivate a taste for flowers, as the occupation of any leisure moment in this way is the bane of gossip, and the promoter of health and happiness.

Towards the end of the month, make a light hot bed in some sheltered spot, with leaves and stable manure, cover the surface 6 to 8 inches thick with light earth, on this sow Zinnias, Hollyhocks, Everlastings, Phlox Drummondii, Ten Week Stocks, &c., covering the glass at night with mats, and so soon as the plants make their appearance, let them have all the light possible, giving air in mild weather.

In the GREENHOUSE, observe the instructions given last month with regard to air and giving of water; and should the Green fly make its appearance then fumigate with tobacco; to kill Red spider, pure water mixed with a little sulphur, well applied with the syringe, will soon subdue them.

Plant in single pots such seedlings and cuttings as are well rooted and fit to handle, and shift into larger ones such plants as have become pot-bound, or of which you wish to make large specimens. A few Gladiolus roots may now be potted, these look well when in bloom mingled with shrubby plants, and do not take up much space.

So soon as Camellias have done blooming, they may be shifted into larger pots, and the temperature should be raised so as to range between 60° and 70°, giving a partial shade, and keeping the atmosphere humid.

Repot Gloxinias and Achimenes, observing to drain the pots well, set them in a warm part of the house, and give but little water till such time as they begin to grow. Amaryllis bulbs, should now be started into growth by giving them more heat and water.

W. D. BRACKENRIDGE,
Nurseryman, Govanstown, Md.

Live Stock Register.



Oil Cake for Stock.

In the April number of the *Stock Journal* now before me I find an enquiry regarding Linseed oil meal to feed cows upon. It is a question that I, as well as many others would be glad to hear more upon the subject, through the columns of the *Journal*, should it meet the wishes of those who have had experience with it. Would it be profitable for a man to pay the prices quoted in the New York papers of about fifty dollars per ton, pay the freight and haul it a distance of twelve miles? You answer that the meal is beneficial fed in connection with other food. What other food is best to be fed with it, and in what quantities or proportions? I believe that there is not one instance in this vicinity that it has been used, although I have often heard it talked over some, but most of farmers here think that it would be a waste of money to use it in such articles of food for stock, and perhaps an article or two in your valuable paper may enlighten the minds of many, especially those young men who are about to start farming on their own hook, and more especially those who are desirous of improving their stock, and you will oblige a few subscribers in this locality.

P. D. G.

South Gibson, Susquehannah Co., Penn.

Oil cake meal should always be fed as a *mash*, either cold or mixed with cut straw or hay, corn meal, bran, or other mill feed. Add about a pound of cake meal to a mess for each animal to the other ingredients and feed once a day at first for a few weeks and afterwards twice a day. You will soon see a great difference in the appearance of the animal as well as in the yield of milk.

You consider \$50 a ton a large expenditure of capital, without considering that a ton will make 2000 feeds costing but two and a half cents per mess. It will pay.—*Eds. American Stock Journal.*

The American Farmer, (Rochester, N. Y.)—The January No. of this monthly is received, and is now published by John R. Garretsee, Esq. We regret to learn that after all the work for the January No. was nearly perfected a destructive fire broke out in Rochester, which destroyed their entire edition. Notwithstanding the calamity, friend Garretsee has given us a first class No. to begin the year with, and promises that the next shall be issued with all the contemplated improvements.

How the Horse "Dexter" is Fed.

From the *Hearth and Home* we clip the following, which we think will prove of interest to horsemen generally :

"At six every morning, Dexter has all the water he wants and two quarts of oats. After eating, he is walked for half an hour or more, then cleaned off, and at nine has two quarts more of oats. If no drive is on the card for afternoon, he is given a half to three-quarters of an hour of gentle exercise. At one o'clock he has oats again, as before, limited to two quarts.

From three to four he is driven twelve to fifteen miles; after which he is cleaned off and rubbed thoroughly dry.

He has a bare swallow of water on return from drive, but is allowed free access to his only feed of hay, of which he consumes from five to six pounds.

If the drive has been a particular sharp one, he is treated, as soon as he gets in, to a quart or two of oatmeal gruel; and when thoroughly cooled, has half a pail of water and three quarts of oats, with two quarts of bran moistened with hot water.

Before any specially hard day's work or trial of speed, his allowance of water is still more reduced."

STOP HIS KICKING.—It is not an uncommon thing to meet with horses who will kick while in harness. Such horses are dangerous to drive, and the habit diminishes their value very much. A subscriber gives the following simple method of preventing the practice of this pernicious trick :

Take a forked stick, about two feet long, varying a little, according to the size of the horse; tie the end of the fork firmly to each end of the bridle bit, and the other end of the stick to the lower end of the collar, so as to keep the head up, and this will prevent his kicking. A few days working in this manner will commonly effect a cure. Horses are more apt to kick when turning in ploughing, or harrowing, than when doing any other work.—*Am. Stock Journal.*

WHEN TO SHUT UP PIGS FOR FATTENING.—If the pens are furnished with shelter and with water, we should say begin in August. A pound of pork is made much more economically in warm weather than in cold. Little food is wasted in keeping up the animal heat, and many green articles are available which are out of season late in the fall. Swine enjoy fresh clover feed every day with their cooked corn or provender. Sweet corn ought to be raised for the purpose of feeding in the green state to swine. It greatly promotes their thrift, and, we have thought, makes flesh as economically as any food that can be given.—*Ez.*

USEFUL RECIPES.

REMEDIY FOR COLIC.—A correspondent W. H. C. Price, in the *Field, Turf and Farm* says: "The recent death of Mr. Bonner's celebrated horse, Auburn, suggests to me the propriety of communicating to your readers a very simple and effective remedy for colic in horses. It is simply to drench them with a preparation of chlorine and permanganic acid, which can be procured at any drug store. I have used it myself, and known it used repeatedly, and have never known it to fail."

REMEDIY FOR RED WATER IN CATTLE.—A correspondent in the *Maine Farmer* gives the following cure for red water, or a discharge of bloody water in cows and oxen: For a cow, I take two ounces of nitric acid and divide it into three equal parts, and give one part in half a pint of water every other day, till I give the whole. This is a sure remedy, that never fails unless the animal is past cure.—For oxen I give one ounce for a dose.

INFLAMED BOWELS IN Cows.—If a cow fails to eat her after-birth, does any injury result therefrom? and if so, is there any remedy. What is the character of the injury?

What remedy would you advise for inflamed bowels of a cow that has very recently given birth to a calf. She was driven about forty miles and gave delivery in about half an hour after her arrival.

R. V. M.

[We are of the opinion that a cow should be allowed to eat the after-birth, as we act contrary to nature to prevent it. Herbivorous animals would not have this propensity to eat the placenta, was there not some useful purpose to be effected by it. It is either designed by nature to support the strength of the animal, or to have some aperient or salutary effect on her; cows that do not eat it often become feverish, and the bowels and udder inflamed, when inflammation of the bowels ensues the cow should be bled and physiced, kept moderately warm, and have warm water with bran mashes, $\frac{1}{2}$ lb. Epsom or Glauber's Salts makes a good physic. Oil cake meal is very healing to the bowels if fed as a warm mash.]—*Am. Stock Journal*.

AN EXCELLENT HORSE LINIMENT.—Take 1 pint alcohol, $\frac{1}{2}$ ounce Castile Soap, $\frac{1}{2}$ ounce Gum Camphor, $\frac{1}{2}$ ounce of Salammoniac. When these are dissolved, add 1 ounce of Laudanum, 1 ounce origanum, $\frac{1}{2}$ ounce oil Sassafras, and 2 ounces Spirits of Hartshorn. Bathe freely. Excellent for strains, bruises, sprains, and windgalls.

TO PREVENT WOUNDS FROM MORTIFYING.—Sprinkle sugar on them. The Turks wash fresh wounds with wine, and sprinkle sugar on them. Obstinate ulcers may be cured with sugar dissolved in a strong decoction of walnut leaves.—*Am. Stock Journal*.

SORE BACKS ON HORSES.—A correspondent in the *Farmer's Gazette*, writes:—I send you an excellent remedy for a sore on a horse. Beat the yolk of an egg with a teaspoon spirits of turpentine and apply to the sore—cover with a soft cloth. I have tried it.

A RECEIPT TO PROTECT SHEEP FROM DOGS.—If sheep are kept in the same lot with cows, or fat cattle, no dog will disturb them. As soon as the dogs approach the sheep, they run to the cattle who drive off the dogs. A farmer for thirty years in Shelby county, by adopting this plan, never lost a sheep by dogs, although in the same night the same dogs killed sheep in the farms North and South of him.—*Industrial (Louisville) Gazette*.

Packard's Monthly.—The January No. of this valuable monthly is received, it is replete with choicest reading and can be had one year for \$1, by addressing S. S. Packard, 937 Broadway, New York.

The Poultry House.

Cure for Roup.

One of the most troublesome diseases in the poultry yard is roup, which, in its general characteristics, is in some respects similar to catarrh. There is discharge from the nostrils, the lids of the eyes become swollen, followed by swelling of the face, and the bird finally dies from being unable to take food or from suffocation. Many consider the roup contagious, and it is not unlikely that such is the case. Fowls drinking from the same vessels will take it.

Mr. Alonzo Snider, of this city, one of our best Western poulters, kindly furnishes the *Prairie Farmer* readers with a cure for this disease, which he gives and vouches for, as follows:

"When the fowl is first taken with roup, no matter how badly the head is swollen, remove it to a dry room in the barn, and give a dessert spoonful of alum water twice a day, as strong as it will dissolve; also wash the subjects head in it. If the fowls rattle badly in the throat, make a swab by tying a little tow on a small stick, and swab the throat out with the same mixture. In this way I have cured fowls in two days, that were nearly blind with swollen heads, and I have never known it to fail in a single instance, if taken in season."

ANOTHER CURE.

A Richmond correspondent communicates the following cure which he says is infallible:—Take of sulphur and castile soap equal quantities, and make into pills the size of garden peas; give one a day until the disease is cured.

"HOW DO YOU DO IT?"—Such was the question asked us when we told a neighbor that we made our hens lay all winter. Our answer was briefly as follows: Keep them in a warm, tight place; give them warm water to drink; change their food twice a week; give occasionally a feed of mashed boiled potatoes with meal and a little black pepper added, and throw into the pen once a week from the cellar, a cabbage head for them to pick upon.—*Maine Farmer*.

WATER FOR POULTRY.—One of the desirable, as well as necessary things where fowls are kept confined, is a constant supply of clean water. A very good "fountain" for this purpose is described by the *New England Farmer*. It is a common jug set in a pan, or dish, a trifle larger in circumference than the jug. The jug is filled, or partly filled, with water, and tightly corked. A small perforation is made in the bottom of the jug through which the water gradually flows into the dish or pan in which it is placed, so as to secure a fresh and constant supply for the poultry. The same object may be obtained by the use of a glass bottle filled with water and supported in an erect position, with the neck or nozzle near the bottom of a dish or trough, beneath the surface of the water.

Suggestions in Building Dwelling Houses.

In planning a dwelling for family occupancy, three prominent characteristics are to be kept in view :

1st. The size and arrangement of the house must be adapted to the comfort, and to the means of the family.

2d. The climate is to be considered

3d. In connection with climate, the material to be used in the construction.

Keeping these in view, I shall make a few suggestions for the consideration of families of moderate fortunes, who may be planning country residences.

1st. That but two apartments besides the hall, the kitchen and the offices, are required.

These two, dining room and a parlor should be large and adjoining, so as to communicate. This for convenience and economy of fuel in Winter.

Having determined on the size and proportions of these rooms, and the chambers over them, the next consideration will be the kitchen and domestic offices.

These should each be planned separately, and then placed together in such contiguity as will best adapt them to the family requirements. The error mostly committed by those planning dwellings of moderate size is in first laying down the outline or outside of the house, and afterwards dividing it into apartments; the consequence of which is, that the rooms are likely to be reduced in size to make place for the pantries, closets and other offices.

An ingenious architect will, after having determined on the number, size and proportion of the apartments, arrange them with proper regard, both to the convenience and architectural beauty of the house. Domestic comfort should not be sacrificed for outside show.

We have here in this country to encounter a climate which differs from that of most other countries. The thermometer ranges over more than 150 degrees Fahrenheit, from Summer to Winter. That is, we have in Winter to contend against a temperature of more than 10 degrees below zero, and in Summer of 140 degrees F., in the sun.

The architect has to protect the occupants of his dwellings against the dangers and discomforts arising from these extremes; to exclude heat in Summer and cold in Winter. Whilst his walls, and doors, and windows must exclude the rigors of an almost Arctic Winter, they must equally provide against the pernicious dampness of our Spring weather, and the sultriness of our Summers.

Double windows and double doors—with every conceivable pattern of weather strip—are used to close out the penetrating blasts of Winter, then to be removed on the return of Summer to admit the breeze. The double windows and double doors generally used are unsightly and inconvenient. In place of them I would suggest oriel and bay windows. These, when properly constructed, so as to present three (3) open sides, each provided with sash and shutters, which may be opened and closed at will, afford protection from the Summer sun, and, when opened, entrance to the breeze in our sultry season; in the Winter time, when provided with shutters and glass, so arranged as to shut them off from the apartments, they are a much more effectual protection against the entrance of cold than any other window.

Casement sash, when they can be used, and when

properly constructed, are the cheapest and the most conducive to comfort of all others. At the same time, while admitting free ventilation in Summer, they exclude wind, rain and snow in Winter.

Lastly : As regards the material to be used in the construction of the building, I recommend a wall of common cheap brick, to be prepared for weather boards (not frame), with which the building is to be encased.

A house thus built, the weather boards being nailed on horizontally, will be found to be the cheapest, the most comfortable and the most enduring of all others in this climate. Let any one observe a house built of brick or stone, either painted or plastered, and it will be seen that after a drifting rain the walls become saturated with moisture.—And should the Winter immediately succeed, this moisture will freeze into ice ; and the residents are, for the season, encased in ice and dampness.

Lathing a house on the inside will certainly exclude some of this moisture, but nothing except weather boarding will protect the walls from the ruinous effects of moisture and ice. By weather boarding a brick or stone house, we effectively exclude cold, and heat, and wind and moisture.

As to the durability of wood there can be no question when it is painted, and when the boards are placed horizontally and well lapped.

In New England, New York and the Southern States, wooden houses may be seen still in good repair which are more than a century old.

Every architect has seen the studding and joists and jamb-casing on the eastern sides of stone houses greatly decayed, but after a few years of occupancy, the result due to the dampness of the stone.

A brick house weather boarded will not require lathing on the inside of the walls. I have seen the ceiling of a room reeking with moisture in damp weather, whilst the walls, which were plastered on brick, were dry.

Before closing, I will draw attention to a frequent cause of dampness or sweating walls, namely, that sand is in some instances used in the last coat of plaster, which has been procured from the salt water beaches of the lower Delaware. Sand from thence contains salt, which, in dry weather, may be dry, but in damp, sweaty weather, the salt deliquescent, will forever cause damp ceilings. After a time, not only will the plaster so composed become rotten, but also whatever wood work is in contact with it. Hence, care should be taken to procure the sand from the upper Delaware.

In a house of moderate size the ceilings should not be higher than ten feet.

High ceilings in winter are not easily warmed ; and, besides this objection, high ceilings entail difficult stairs. Where the ceilings are to be ornamented, every foot above ten feet in height will require a very large addition to the length of the room.—For example, take into consideration a room, the ceiling of which is to be adorned with paintings, would it not be absurd to have those ceilings of so great a height, in proportion to the length of the room, that the ornaments of the ceiling could only be seen by a painful elevation of the head ? Just taste requires that the fresco or ornamental painting on a ceiling may be seen without an effort ; and this can only be done when on high ceilings, in very large rooms. In walking through a suite of rooms of pleasing proportions, the paintings on the ceilings as on the walls are enjoyed if viewed without fatigue.—E. C. E., in *Builder's Journal*.

Ladies Department.

THE CELESTIAL ARMY.

BY T. BUCHANAN READ.

I stood by the open casement
And looked upon the night,
And saw the westward going stars
Pass slowly out of sight.

Slowly the bright possession
Went down the gleaming arch,
And my soul discerned the music
Of their long triumphal march.

Till the great celestial army,
Stretched far beyond the pole,
Became the eternal symbol
Of the mighty march of souls.

Onward, forever onward,
Red Mars led down his clan,
And the moon, like a mailed maiden,
Was riding in the van.

And some were bright in beauty,
And some were faint and small,
But these might be in their greatest height
The noblest of them all.

Downward, forever downward,
Behind earth's dusky shore,
They passed into the unknown night,
They passed—and were no more.

No more! Oh, say not so!
And downward is not just,
For the sight is weak and the sense is dim
That looks through heated dust.

The stars and the mailed moon,
Though they seem to fall and die,
Still sweep with their embattled lines,
An endless reach of sky.

And though the hills of death
May hide the bright array,
The marshalled brotherhood of souls
Still keeps its upward way.

Upward, forever upward,
I see their march sublime,
And hear the glorious music
Of the conquerors of time.

And long let me remember
That the palest, faintest one,
May to diviner vision be
A bright and blessed sun.

A STORY OF LONG AGO.

The long time ago of which I mean to tell, was a wild night in March during which, in a fisherman's hut ashore, sat a young girl at her spinning-wheel and looked out on the dark, driving clouds, and listened trembling to the wind and sea. The morning light dawned at last. One boat that should have been riding on the troubled waves was missing—her father's boat! and half a mile from his cottage, her father's body was washed up on the shore.

This happened fifty years ago, and fifty years is a long time in the life of a human being; fifty years is a long time to go on in such a course as the woman did of whom I am speaking. She watched her father's body, according to the custom of her people, till he was laid in the grave. Then she laid down on her bed and slept, and by night got up and set a candle in her casement, as a beacon to the fishermen and a guide. She sat by the candle all night, and trimmed it and spun; then when day dawned she went to bed and slept in

the sunshine. So many hanks as she had spun before for her daily bread, she spun still, and one over, to buy her nightly candle; and from that time to this, for fifty years, through youth, maturity and old age, she has turned night into day, and in the snow storms of winter, through driving mists, deceptive moonlight and solemn darkness, that northern harbor has never once been without the light of her candle.

How many lives she has saved by this candle, or how many a meal she has won by it for the starving families of the boatmen, it is impossible to say; how many a dark night the fishermen, depending on it, went fearlessly forth, cannot now be told. There it stood, regular as a lighthouse, steady as constant care could make it. Always brighter when daylight waned, they had only to keep it constantly in view and they were safe; there was but one thing that could intercept it, and that was the rock. However far they might have stretched out to sea, they had only to bear down straight for that lighted window, and they were sure of a safe entrance into the harbor.

Fifty years of life and labor—fifty years of sleeping in the sunshine—fifty years of watching and self-denial, and all to feed the flame and trim the wick of that one candle! But if we look upon the recorded lives of great men and just men and wise men, few of them can show fifty years of worthier, certainly not of more successful labor. Little, indeed, of the "midnight oil" consumed during the last half century so worthily deserved the trimming. Happy woman—and but for the dreaded rock her great charity might never have been called into exercise.

But what do the boatmen and the boatmen's wives think of this? Do they pay the woman? No, they are very poor; but poor or rich, they know better than that. Do they thank her? No. Perhaps they feel that thanks of theirs would be inadequate to express their obligations, or perhaps long years have made the lighted casement so familiar that they look upon it as a matter of course. Sometimes the fishermen lay fish on her threshold and set a child to watch it for her till she wakes; sometimes their wives steal into her cottage, now she is getting old, and spin a hank or two of thread for her while she slumbers; and they teach their children to pass her hut quietly, and not to sing and shout before her door, lest they should disturb her. That is all. Their thanks are not looked for—scarcely supposed to be due. Their grateful deeds are more than she expects, and as much as she desires.

How often in the far distance of my English home, I have awoken in a wild winter night, and while the wind and storm were rising, have thought of that northern bay, with the waves dashing against the rock, and have pictured to myself the casement and the candle nursed by that bending aged figure. How delighted to know that through her untiring charity the rock has long lost more than half its terrors, and to consider that, curse though it may be to all besides, it has most surely proved a blessing to her.

You, too, may perhaps think with advantage on the character of this woman, and contrast it with the mission of the Rock. There are many degrees between them. Few, like the Rock, stand up wholly to work ruin and destruction; few like the woman, "let their light shine" so brightly for good. But to one of the many degrees between them, we must all most certainly belong—we all lean towards the woman or the rock. On such characters you do well to speculate with me, for you have not been cheated into sympathy with ideal shipwreck or imaginary kindness. There is many a rock elsewhere as perilous as the one I have told you of—perhaps there are many such women; but for this one, whose story is before you, pray that her candle may burn a little longer, since this record of her charity is true.—*Jean Ingelow.*

RECEIVED.

From J. M. Thorburn & Co., New York, their annual descriptive catalogue of vegetables and agricultural seeds, &c., embracing every standard and improved variety.

From Wm. D. Cabell, Norwood School, Nelson Co. Va., circulars for the Session of 1869. The Faculty is composed of the following gentlemen—Wm. D. Cabell, Principal—L. M. Blackford, M. A. Associate Principal—Waller Holladay, Richard B. Tunstall, M. A.—Wm. N. Scott, Henry Scharf, Instructor in Elocution and Drawing—Wm. L. Akers, Instructor in Book-keeping.

From Thomas Meehan, Germantown, Pa., wholesale price list of Fruit, Deciduous and Ornamental Trees and Plants.

New York State Poultry Exhibition.—The first annual exhibition of this Society will be held in the city of New York, commencing March 22d, 1869, to continue one week. The Society will present awards in gold, silver and bronze medals, &c. Parties interested will address Daniel E. Gavit, Secretary, box 150, New York.

"ONWARD"—We have received the February number of this new monthly, conducted by Captain Mayne Reid, and published by G. W. Carleton, of New York. Its typography is unequalled, and its literature, we believe, will prove acceptable. Mayne Reid is known all over the country by his intensely interesting novels. We believe the February No. before us is the *second* issue, but we could not find the fact stated anywhere in the Magazine. We would also give the price, per annum, but that the publisher has failed to state it.

THE GALAXY.—This illustrated monthly for February is on our table—and maintains its interest—it is replete with choice reading. Sheldon & Co., 498 Broadway, New York—price \$4 per annum.

Manufacturer and Builder.—The first number of this new industrial journal has made its appearance upon our table. It consists of thirty-two large quarto pages, cut and stitched, with a tinted cover, artistically engraved.—The typography and material of THE MANUFACTURER AND BUILDER are unexceptionable, and the engravings which accompany many of its articles harmonize well with its general character.

Every manufacturer and builder—in fact, every skilled workman of every trade—should take this paper. It is published monthly by Messrs. Western & Co., 37 Park Row, New York City, at the very low price of \$1 50 a year; clubs of twenty or more are supplied at \$1 per copy.—Specimen copy will be sent free upon application to the publishers.

The Bee Keeper's Journal and Agricultural Repository.—The first number of this monthly is received and is published in the interest of those indicated. It is published at Nevada, Ohio, by H. A. King & Co., at \$1 per year.

Annual Report of the Ohio State Board of Agriculture.—We have received from John H. Klippert, Esq., Secretary of the Society, through the attention of Richard Colvin, Esq., of Baltimore, a copy of this report. It contains a great amount of interesting matter, consisting of essays and reports from different departments.

Iowa Agricultural Report for 1867.—We have received through the politeness of J. M. Shaffer, Esq., Secretary of the Society, a copy of this report. It contains besides Agricultural proceedings the report of the Iowa State Horticultural Society for the same year, prepared by W. W. Beebe, Esq., Secretary. It contains many valuable essays on various subjects, proceedings of the Society and report of the committee on Agricultural Implements, which report is numerously illustrated with improved machines, some of which we shall from time to time publish in the Maryland Farmer.

The Rural Fireside.—The first No. of this new monthly is received. It is devoted to agriculture and literature. Published by W. B. Dimon & Co., New York, at \$1 per year.

The Little Corporal.—An original magazine for Boys' and Girls, and for older people who have young hearts. Edited by Alfred L. Sewell and Emily H. Miller, Chicago, Illinois—price \$1 per year.

Diseases of Sheep Explained and Described—With the proper remedies to prevent and cure the same. With an essay on Cattle Epidemics. Especially dedicated to the use of farmer's, sheep owners, &c. By Henry Clok, V. S., Philadelphia. Claxton, Remsen & Haffelfinger—price \$1.25.

We have received from Messrs. Cushing & Bailey, of Baltimore, a copy of this valuable work. The chief object of this book consists in a description of the internal and external diseases of sheep, as well as of their treatment and prevention. Everything related by the author is the result of his own experience and observation. Those interested in sheep husbandry will find this a valuable acquisition to their library.

PARENTS will do well to keep in mind that the new Silver Tips will make shoes wear twice as long as shoes without tips, consequently saving half the cost of keeping children supplied with shoes. No one can afford to buy children's shoes not protected with metal tips.—Journal.

SHEEP—BELLS A CHARM AGAINST DOGS.—Some days ago we read in an agricultural magazine a statement of the large annual loss of sheep destroyed by dogs, probably to the extent of \$150,000. Friday evening we were quietly seated in our room looking through the last number of the *Scientific American*, that excellent and instructive publication, and we read a communication remarking upon the circumstances, that, the *bell wether* never was harmed by dogs attacking a flock of sheep. Upon observing this fact, a farmer, it seems, experimented, and placed on the necks of a dozen sheep in the flock, perhaps a half-dozen small bells on each, fixed to collar, and the result of his observation is, that, those likewise escaped harm from the dogs.—*Petersburg Express*.

If the roots of trees are dipped into water just before planting, the earth that sticks to them will give immediate support to the small fibres.

THE MARYLAND FARMER.

BALTIMORE MARKETS--Jan. 29.

Prepared for the "MARYLAND FARMER" by JOHN MERRIMAN & CO., BALTIMORE.

[Unless when otherwise specified the prices are wholesale.]

BEESWAX—Western 3cts.; Southern 40 cts.

COFFEE.—Rio 15½@18½ cts., gold.

COTTON.—Low Middling 27½@28 cts.; Middling, 26½@28 cents; Ordinary Upland 24½ cents.; Good Ordinary 27 cts.

FEATHERS.—Common to mixed 40@50 cts. per lb.; fair to good 55@60 cts.; prime live geese, 80 cts.

FISH.—No. 1 Bay mackerel \$26@27½; No. 1 Shore \$22@23; No. 2 \$18@19; No. 3 \$13@14; medium \$12.00@13; Labrador herring \$3.50@9.50; gibbed \$5.50@6.50; Codfish \$5.50@7 per 100 lbs.

FLOUR—

Howard Street Super.....	\$ 6.25 @	6.75
" " Shipping Extra.....	7.25 @	8.50
" " High Grades.....	9.00 @	9.50
" " Family.....	9.75 @	11.50
Western Winter Super.....	6.00 @	6.75
" " Shipping Extra.....	7.25 @	8.00
" " Choice Extra.....	8.00 @	9.00
" " Family.....	9.50 @	10.00
Northwestern Super.....	6.00 @	6.50
do Extra.....	7.00 @	7.75
City Mills Super.....	6.25 @	7.50
" " Standard Extra.....	8.00 @	8.50
" " Shipping brands Extra.....	9.50 @	9.75
Patapsco, Horicon, Reservoir and Weverton Family.....	.....00 @	12.50
G. W. Legg's Family.....	.....00 @	13.50
Union Mills Acme Family.....	.....00 @	14.00
Greenfield Family.....	.....00 @	14.00
James S. Welch's Family.....	15.00 @	15.00
Baltimore High grade Extra.....	.....00 @	13.50
Ashland Family.....	.....00 @	12.50
Linganore.....	.....00 @	12.50
Rye Flour.....	7.00 @	7.50
Corn Meal—City Mills.....	.....00 @	5.00
Buckwheat—New York \$100 lb.....	4.75 @	5.00
Pennsylvania.....	4.50 @	4.75

FERTILIZERS—

The Agent of the Peruvian Government has advanced the price of Guano \$2.50 per ton, gold, now selling in lots of 50 tons at \$62.50 gold. Dealers are charging \$90.00@93, as to quantity, per ton of 2000 lbs.

Turner's Excelsior.....	70	Y ton of 2000 lbs.
Turner's Ammo. S. Phos.....	55	Y ton "
Coe's Ammo. S. Phos.....	55	Y ton "
Soluble Pacific Guano.....	60	Y ton "
Redonda Guano.....	30	Y ton "
Flour of Bone.....	60	Y ton "
Andrew Coe's Super-phosphate.....	60	Y ton "
Baugh's Raw Bone S. Phos.....	56	Y ton "
Baugh's Chicago Blood Manure.....	50	Y ton "
" " Bone Fertilizer.....	46	Y ton "
Grimes' Pat. Improved Fertilizer.....	48	Y ton "
Zell's Raw Bone Phosphate.....	56	Y ton "
Rhodes' do.....	50	Y ton "
Mapes' do.....	60	Y ton "
Bone Dust.....	45	Y ton "
Hornor's Bone Dust.....	45	Y ton "
Dissolved Bones.....	60	Y ton "
Baynes' Fertilizer.....	40	Y ton "
" " Fine Ground Bone.....	45	Y ton "
" A" Mexican Guano.....	33	Y ton "
" " do.....	30	Y ton "
Moro Phillips' Super-Phosphate.....	56	Y ton "
Berger & Burtz's S. Phos. of Lime.....	55	Y ton "
Md. Fertilizing & Manufacturing Co's Ammoniated Super-Phosphate.....	50	Y ton "
Fine Ground Bone Phosphates.....	30	Y ton
Plaster.....	\$2.25	Y bbl.
Sulphuric acid, 3 cts. Y B.—(Carboy \$3.)		
Nitrate of Soda (refined Saltpetre) 6½ cts. per lb in kegs of 100 lbs.		

GRAIN.—Wheat—Prime to choice red 23@25@26; common to good do. 1.90@2; Maryland white 2.25@2.40.—Corn—Prime new white 86@88cts.; damp 83@84 cts.; old white 90; new yellow 85@87. Oats—70@75 cts. weight.—Rye—\$1.50@1.55.

HAY AND STRAW.—Maryland Timothy baled \$20@22; Rye Straw \$17@18 per ton.

MILL FEED.—Brown Stuff 25 cts; middlings 38@40 cts., per bushel.

MOLASSES—Porto Rico, 55 cts; Cuba clayed 35@38 cts. E. Island 45@65 cts. New Orleans 70@80.

POTATOES.—Jerseys 85@90 cts per bushel; Eastern 95@121.

PROVISIONS.—Shoulders 14 cts.; Rib sides 17½ cts.; clear rib 18½ cts.

SALT.—Fine \$2.90@3.10, per sack; ground alum \$2.10@2.20; Turks Island 50@55 cts., per bushel.

SEED.—Clover \$9.50 Timothy \$3.75; Flax \$2.55.

SUGAR.—Cuba 11½@12; Porto Rico 12½@13; Demarara 14@14½ cts.

TOBACCO—

Maryland	frosted to common.....	\$ 4.00@	\$ 5.50
----------	------------------------	----------	---------

"	sound common.....	6.00@	7.00
---	-------------------	-------	------

"	good do.....	7.00@	8.00
---	--------------	-------	------

"	middling.....	8.50@	10.50
---	---------------	-------	-------

"	good to fine brown.....	11.00@	15.00
---	-------------------------	--------	-------

"	fancy.....	17.00@	30.00
---	------------	--------	-------

"	upper country.....	7.00@	35.00
---	--------------------	-------	-------

"	ground leaves, new.....	4.00@	13.00
---	-------------------------	-------	-------

Ohio	Inferior to good common.....	4.00@	6.00
------	------------------------------	-------	------

"	brown and greenish.....	7.00@	8.00
---	-------------------------	-------	------

"	good and fine red and spangled.....	00.00@	00.00
---	-------------------------------------	--------	-------

"	medium and fine red.....	9.00@	18.00
---	--------------------------	-------	-------

"	common to medium spangled.....	9.00@	13.00
---	--------------------------------	-------	-------

"	fine spangled.....	15.00@	20.00
---	--------------------	--------	-------

"	fine yellow and fancy.....	20.00@	30.00
---	----------------------------	--------	-------

Kentucky	common to good lugs.....	8.00@	10.00
----------	--------------------------	-------	-------

"	common to medium leaf.....	11.00@	14.00
---	----------------------------	--------	-------

"	good to fine.....	15.00@	18.00
---	-------------------	--------	-------

"	select leaf.....	20.00@	25.00
---	------------------	--------	-------

WOOL.—Unwashed, 30@33 cts.; burly 25@27 cts.; tub washed 50@53 cts.; pulled 33@38 cts.

WHISKEY.—1.0@1.02 cts.

OIL CAKE.—This as an article of export is becoming very important to the port of Baltimore. It is brought from the West over the Baltimore and Ohio railroad, and shipped from the company's wharves at Locust Point, with very trifling expense in handling. The quantity shipped hence the past year, reduced to tons, was 15,570, against 6,616 tons in 1867.

WANTED—AGENTS—\$75 to \$200 per month, everywhere, male and female, to introduce the GENUINE IMPROVED COMMON SENSE FAMILY SEWING MACHINE. This Machine will stitch, hem, fell, tuck, quilt, cord, bind, braid and embroider in a most superior manner. Price only \$18. Fully warranted for five years. We will pay \$1,000 for any machine that will sew a stronger, more beautiful, or more elastic seam than ours. It makes the "Elastic Lock Stitch." Every second stitch can be cut, and still the cloth cannot be pulled apart without tearing it. We pay Agents from \$75 to \$200 per month and expenses, or a commission from which twice that amount can be made. Address, SECOMB & CO., PITTSBURGH, PA.; ST. LOUIS, MO., or BOSTON, MASS.

CAUTION.—Do not be imposed upon by other parties palming off worthless cast-iron machines, under the same name or otherwise. Ours is the only genuine and really practical cheap machine manufactured.

WANTED—AGENTS, TO SELL THE AMERICAN KNITTING MACHINE. Price \$25. The simplest, cheapest and best Knitting Machine ever invented. Will knit 20,000 stitches per minute. Liberal inducements to Agents. Address AMERICAN KNITTING MACHINE CO., Boston, Mass., or St. Louis Mo. jan-2t

GENTS WANTED.—\$75 to \$200 per month, or a commission from which twice that amount can be made by selling the latest improved COMMON SENSE FAMILY SEWING MACHINE, price \$18. For circulars and terms, address

**C. BOWERS & CO.
320 South Third st., Philadelphia, Pa.**

LATEST NEW YORK NEWS.

LADIES!

LOOK OUT! LOOK OUT!
LOOK OUT! LOOK OUT!

"Beautifies the Complexion."
"Gives a Rosy Glow to the Cheeks."
"A Ruby Tinge to the Lips."
"Removes all Blotches and Freckles."
"The Best in the World."

"COSTAR'S"

BEAUTIFIER!

THE
BITTER-SWEET AND ORANGE BLOSSOMS.

One Bottle, \$1.00—Three for \$2.00.
1000 Bottles sold in one day in N. Y. City.
~~All~~ All Druggists in BALTIMORE sell it,
Or address "COSTAR," No. 10 Crosby St., N. Y.

"COSTAR'S" Standard Preparations

ARE

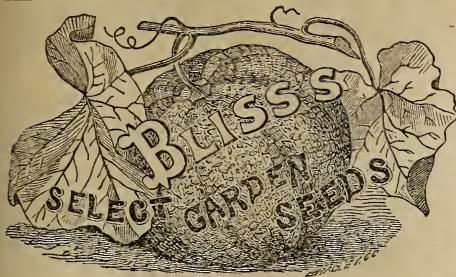
"Costar's" Rat, Roach, &c., Exterminators.
"Costar's" Bed Bug Exterminators.
"Costar's" (only pure) Insect Powder.

"Only Infallible Remedies known."
"18 years established in New York."
"2,000 Boxes and Flasks manufactured daily."
"!!! Beware !!! of spurious imitations."
"All Druggists in Baltimore sell them."

Address

"COSTAR," 10 Crosby St., N. Y.
Or, JOHN F. HENRY (Successor to)
Demas Barnes & Co., 21 Park Row, N. Y.
~~Also~~ Sold in BALTIMORE by all Druggists. ja-ly

THE MARYLAND FARMER.



B. K. BLISS & SON,
Nos. 41 Park Row & 151 Nassau Sts., New York,
(Formerly of Springfield, Mass.)
Importers, Growers and Dealers in
Garden, Field, and Flower Seeds,
Horticultural Implements and Garden
Requisites.

We would invite the attention of all who are interested in the culture of FLOWERS and VEGETABLES, to their large and well-selected assortment of the above, comprising the newest and most approved varieties, both of European and home production, the quality and utility of which cannot be surpassed. For a list of these see their

NEW ILLUSTRATED SEED CATALOGUE,
AND
**GUIDE TO THE FLOWER AND KITCHEN
GARDEN.**

The Fifteenth Edition, enlarged and improved, contains 132 pages of closely printed matter, beautifully illustrated with 100 Engravings, and a descriptive list of 2,500 varieties of Flower, Vegetable and Agricultural Seeds, including all the novelties of the past season, with explicit directions for their culture; also, a list of 125 varieties of French Hybrid Gladiolus, embracing many new sorts now offered for the first time in this country—with many other Summer Flowering Bulbs, consisting of *Amaryllis*, *Tuberoses*, *Tigridias*, *Lillies*, etc.; with much other useful information upon the subject of gardening generally. A copy will be mailed to all applicants upon receipt of 25 Cents. Our regular customers supplied without charge.

**Bliss' Gardeners' Almanac for
1869**

Contains 68 pages of closely printed matter embracing a Monthly Calendar of operations, and a priced list of the leading varieties of Garden, Field and Flower Seeds, with brief directions for their cultivation. A copy will be mailed to all applicants enclosing a three cent stamp. Address

B. K. BLISS & SON, Box 5, 712 P. O.
41 Park Row, and 151 Nassau St., New York.
feb-1t

For Sale.

3 ALDERNEY BULL CALVES—1 one year old;
1 five months old and 1 five weeks old. Also one
pair NOTTINGHAM PIGS.

SAMUEL SUTTON,
St. Denis, Baltimore County, Md.



Catalogue of Peach Trees FOR SALE.

The subscribers offer sale at their Nursery, near CECILTON, Cecil County, Md.

35,000 Peach Trees

Consisting of all the best varieties now in cultivation, to wit:

Hale's Early,	Ward's Late Red Free,
Early Red,	Old Mixon Free,
Early York,	Amelia,
Red Rare Ripe,	Magnum Bonum,
Crawford's Early,	Hawker's Seedling,
Algiers Winters,	Fox's Seedling,
Appleton's Choice,	Smock's Late Yellow,
	Moore's Favorite.

These Trees are one year old from the bud, and are of uncommon large size. The buds were selected from all the principal orchards in the months of August and September, when the trees were in bearing, and may be relied on as the kinds specified, and are now ready for transplanting. Having been engaged in raising Peach Trees alone and the cultivation of peaches for a number of years, we feel confident that we have selected from all parts of the country the very best kinds, and will warrant all trees sold by us to be as represented, as we have them all in bearing in the orchard. We have spared neither money or pains in selecting the best bearers and those most adapted to the markets, and to exclude all others from our list. Will be sold at the very low price of

\$50 PER THOUSAND,

at the Nursery. Address the subscribers at Cecilton, Cecil County, Md.

feb-2t JOHN HUSFELT & SONS.

R. HALLIDAY & SON'S

Descriptive Catalogue of

VEGETABLE AND FLOWER SEEDS

For 1869

Now ready, and mailed to all customers as usual; to others on receipt of stamp. Address

R. HALLIDAY SON,
Baltimore City, Md.

Sorgo Machinery FOR SALE CHEAP.

A complete set of SORGO MACHINERY, consisting of one No. 5 VICTOR MILL (used one season,) one COPPER EVAPORATOR (16 feet long) as good as new, and the necessary fixtures, comprising a full set, which cost \$600, and the whole can be bought for \$300. Apply at office of the

"MARYLAND FARMER,"

feb-1t 24 S. Calvert st., Baltimore.

THE MARYLAND FARMER.

LATAKIA TOBACCO.

The Finest Smoking Tobacco in the World.

Introduced by the distinguished traveler, Bayard Taylor, from Mt. Lebanon, and of the highest promise in the United States. It is of high flavor, (pronounced superior to the finest Yara or Cuba Tobacco,) exhaling a delicious odor, resembling that of dried roses. In the South it will probably ripen two full crops of leaves in a season.

Descriptive Circular mailed to applicants.

Price of Seed, (*by mail, post paid*) 20 cents per packet; \$1 per ounce.

A liberal discount to Seedsmen, Druggists and Dealers.

EDWD. J. EVANS & CO.,
Nurserymen and Seedsmen,
feb-2t York, Pa.

GARDEN & FLOWER SEEDS.

JOHN SAUL

Has now in store his general assortment of Fresh and genuine Garden and Flower Seeds, which are of the very finest quality. His long practical experience as a seedsman fully warrants him in saying, that there are no superior seeds in the market.

FLOWER SEEDS.—He has saved with great care as heretofore, from his rich collection of bedding plants, the following among other valuable seeds :

New Zonale Geraniums; Verbena; Perennial Phlox; Vinca rosea; Auricula eyed Sweet William; Finest Double Zinnias, &c., with all the novelties from England and the Continent, viz: Finest German Aster; English Pansy; Cineraria; Calceolaria, &c.

Garden seeds (except Peas, Beans, &c.) and Flower seeds forwarded by mail at catalogue prices.

JOHN SAUL,
feb-2t 446 7th Street, opposite U. S. Patent Office,
Washington, D. C.

GENUINE IMPORTED NORWAY OATS

Samples Sent Free to Farmers.

From 100 to 130 bushels grown to the acre, weighs from 40 to 45 pounds to the bushel.

This Oats has been grown on every variety of soil, and in every State of the Union, with the most perfect success.

The grain is very large, plump and handsome, has a remarkably thin husk, and ripens earlier than the common varieties.

The straw is bright, clear, stout, and not liable to lodge, is perfectly clear of rust, and grows from 4 to 5 feet high.

We have both the White and Black Norway, both the same price and equally productive.

We will send one quart of the above Oats to any address post paid for..... \$1.00

Two quarts, post paid 2.00

One peck sent by express or freight 3.00

Half bushel, 20 pounds 6.00

One bushel, 40 pounds 10.00

CAUTION. *QG*—We wish it distinctly understood that this is not a light oats, weighing 28 to 32 lbs. raised in New England, and sold under the name of Norway, but Imported Seed, every bushel guaranteed to weigh 40 lbs., or the money refunded.

Samples of both kinds sent free for a three cent stamp. Also Circulars and Testimonials.

Address all orders to N. P. BOYER & Co.,
feb-2t Parkesburg, Chester Co., Pa.

SAUL'S NURSERIES,

WASHINGTON, D. C.

The undersigned respectfully calls the attention of planters to his well grown stock of Fruit Trees, which he offers low. Apple, Pear, Peach, Apricot, Cherries, &c., of finest quality. Concord Grape Vines, a large stock of well rooted vines cheap. Also Black Hawk; Weehawken; Eyes Seedling; Adriondac; Iona; Israella; Salem; Delaware; Roger's Hybrids, &c. Evergreens of all sizes, in quantity, suitable for nurseries. Kittatinny; Wilson's Early and Lawton Blackberries, Strawberries, Chas. Downing; Napoleon 3d; Nicanor; Rippowam; Philadelphia and our celebrated Washington market berries. Pear, Mahogany and other Fruit Stocks.

PLANT DEPARTMENT.

An immense Stock of new and rare plants are now ready for sending out. A set of new Double Geraniums; New Coleus; splendid new Zonale and Nosegay Geraniums; Mrs. Pollock; Sunset and other exquisite tricolors; New Japanese Chrysanthemums; New Dahlia, &c. Roses, all the new varieties of '67 and '68 including Miss Ingram, the finest light rose ever sent out. Catalogues mailed to applicants.

feb-2t JOHN SAUL,
446 7th Street, Washington, D. C.

300,000 PEACH TREES AT REDUCED PRICES!

Trees all budded and stock grown from natural pits; Trees fine and free from disease. Will be sold low to clear the ground.

Large stock of Apples, Pears, Plums, Cherries, Apricots and Nectarines; Raspberries and Blackberries; Strawberries, Gooseberries and Currants; Grapes, Quinces and Rhubarb; Asparagus, Ornamental Trees, Roses and Shrubbery; Hot House Plants, &c. Send stamp for catalogue.

Orders by mail will receive prompt attention.

GREAT NORTHERN & SOUTHERN NURSERIES,
Wilmington, Delaware.

feb-3t RANDOLPH PETERS.

GET THE BEST

PRICES REDUCED!

100,000 WILSON'S EARLY and KITTATINNY BLACKBERRIES, all grown from the original stock. For two years past I have sold the fruit at \$16 per bushel wholesale, and it has retailed at \$1 per quart.

75,000 PHILADELPHIA AND CLARKE RASPBERRIES, the fruit of which we sold last year at 68 cents per quart.

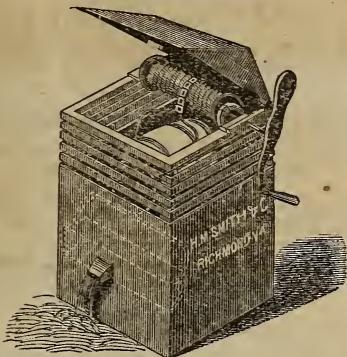
50,000 DAVISON'S THORNLESS, Mammoth Cluster, Cream, Ellisdale and Imperial Red RASPBERRIES.

20 ACRES DOOLITTLE BLACK RASPBERRIES, not yet enumerated. Wild Goose Plums and Crystal White Blackberries.

Send stamp for Catalogue and Spring prices.

WILLIAM PARRY,
Cinnaminson, N. J.

feb-2t



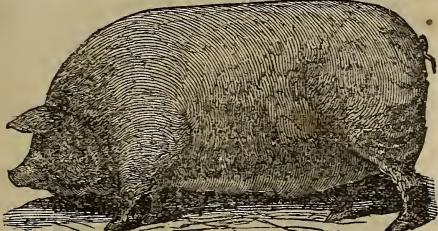
SMITH'S PATENT WELL-FIXTURE.

This device for raising water was patented in 1859, and an important improvement patented in 1868.

Its superiority over all other well-fixtures is attested by FOUR FIRST PREMIUMS awarded it at Agricultural Fairs in 1868. At Staunton and Lexington this premium was awarded over Well-fixtures, which had taken the first premium at several Northern Fairs where we did not compete. No pumps of any kind can be sold in districts where our Well-fixture is properly known. Over SEVEN THOUSAND are in use, and the demand is constantly increasing. A liberal discount for large orders from dealers.

H. M. SMITH & CO., Manufacturers,
feb-3t Richmond, Va.

PREMIUM CHESTER WHITE PIGS.



Bred and For Sale by

GEO. B. HICKMAN,

WEST CHESTER, CHESTER CO., PENN.

Send for a Circular and Price List. feb-3t

GIANT WAX BEANS, (Pole.)

Pods 6-9 inches long, pale waxy yellow, stringless and very fleshy and tender, even when full grown. of excellent quality, and remarkable productiveness. One of the most valuable varieties for amateur or market culture.

Price of Seed, (*by mail, postage paid.*) 25 cents per packet.
EDWD. J. EVANS & CO.,
feb-3t York, Pa.

VALUABLE FIELD SEEDS

NEW BRUNSWICK OATS.—A very handsome White Oats, with a large, plump, heavy grain, weighing (in favorable seasons) 45 pounds per bushel, and yielding abundantly—\$1 per peck, \$3 per bushel.

IMPROVED PENNSYLVANIA GOURD SEED CORN—Exceedingly productive and valuable—\$1 per peck, \$3 per bushel.

EARLY WHITE MARROW BEANS.—One of the most valuable varieties for field culture, \$2 per peck, \$7 per bushel.

POTATOES.

EARLY GOODRICH—Very valuable for early market culture, \$2 per bushel, \$5 per barrel.

HARISON—The best late market Potato; enormously productive—\$2 50 per bushel, \$7 per barrel.

EARLY ROSE—Exceedingly early and of superior quality; of the highest promise—\$5 per peck, \$15 per bushel.

VANDERVEER'S SEEDLING—Large and very productive; new—\$1.50 per peck, \$5 per bushel.

Also a full assortment of Fresh Garden Seeds, including all the most valuable NOVELTIES.

EDWD. J. EVANS & CO.

feb-3t York, Pa.

BOWER'S COMPLETE MANURE,

MANUFACTURED BY

HENRY BOWER, Chemist,

PHILADELPHIA.

MADE FROM

Super-Phosphate of Lime, Ammonia and Potash.

WARRANTED FREE FROM ADULTERATION.

This Manure contains all the elements to produce large crops of all kinds, and is highly recommended by all who used it, also by distinguished chemists who have, by analysis, tested its qualities.

Packed in Bags of 200 lbs. each.
And by dealers generally throughout the country.

DIXON, SHARPLESS & CO.,

AGENTS,

39 South Water & 40 South Delaware Avenue,
PHILADELPHIA.

FOR SALE BY

WILLIAM REYNOLDS,

79 SOUTH STREET, BALTIMORE, MD.

And by dealers generally throughout the country.
For information, address Henry Bower, Philadelphia.

feb-1y

All communications for the MARYLAND FARMER, will be addressed to S. S. MILLS & CO., No. 24 S. CALVERT STREET, BALTIMORE, MD.

FOUTZ'S

CELEBRATED

Horse and Cattle Powders.



This preparation, long and favorably known, will thoroughly re-invigorate broken down and low-spirited horses, by strengthening and cleansing the stomach and intestines.

It is a sure preventive of all diseases incident to this animal, such as LUNG FEVER, GLANDERS, YELLOW WATER, HEAVES, COUGHS, DIS. TEMPER, FEVERS, FOUNDER, LOSS OF APPETITE AND VITAL ENERGY, &c. Its use improves the wind, increases the appetite—gives a smooth and glossy skin—and transforms the miserable skeleton into a fine-looking and spirited horse.



To keepers of Cows this preparation is invaluable. It is a sure preventive against Rinderpest, Hollow Horn, etc. It has been proven by actual experiment to increase the quantity of milk and cream twenty per cent. and make the butter firm and sweet. In fattening cattle, it gives them an appetite, loosens their hide, and makes them thrive much faster.

In all diseases of Swine, such as Coughs, Ulcers in the Lungs, Liver, &c., this article acts as a specific. By putting from one-half a paper to a paper in a barrel of swill the above diseases will be eradicated or entirely prevented. If given in time, a certain preventive and cure for the Hog Cholera.



DAVID E. FOUTZ, Proprietor,
BALTIMORE, Md.

For sale by Druggists and Storekeepers throughout the United States, Canadas and South America.

FOUTZ'S MIXTURE,
The Great External Remedy,
For Man and Beast.
IT WILL CURE RHEUMATISM

The reputation of this preparation is so well established, that little need be said in this connection.

ON MAN it has never failed to cure PAINFUL NERVOUS AFFECTIONS, CONTRACTING MUSCLES, STIFFNESS AND PAINS IN THE JOINTS, STITCHES IN THE SIDE or BACK, SPRAINS, BRUISES, BURNS, SWELLINGS, CORNS and FROSTED FEET. Persons affected with Rheumatism can be effectively and permanently cured by using this wonderful preparation; it penetrates to the nerve and bone immediately on being applied.

On HORSES it will cure SCRATCHES, SWEENEY POLL-EVIL, FISTULA, OLD RUNNING SORES, SADDLE or COLLAR GALLS, SPRAINED JOINTS, STIFFNESS OF THE STIFLES, &c. It will prevent HOLLOW-HORN and WEAK BACK IN MILCH COWS.

I have met with great success in bringing my Mixture within the reach of the Public. I am daily in receipt of letters from Physicians, Druggists, Merchants and Farmers, testifying to its curative powers.

DAVID E. FOUTZ, Sole Proprietor,
BALTIMORE, Md.

feb-1y



D. E. WILSON,

(Successor to J. D. ROSENBERGER & CO.)

Commission Merchant,

And Wholesale Dealer in

**COUNTRY PRODUCE and SEED POTATOES
OF ALL KINDS.**

No. 38 NORTH DELAWARE AVENUE,

PHILADELPHIA, Pa.

Consignments solicited.

feb-6m

CRANBERRY VINES

Per 1000 \$5.

EGGS of Black Spanish White Face Chickens per dozen 1.50. A small lot of Pullets for sale, each \$3. All kinds of TREES and SEEDS.

ALLAN & JOHNSON,
Richmond, Va.

feb-2t



Game Chickens.

For sale a lot of GAME CHICKENS—Stags and Pullets—of the English Breed, and pure. The breeder guarantees purity. Price \$5 per pair; trios \$7.50. Address "MARYLAND FARMER," Baltimore, Md.

feb-3t*

**IRON AND WIRE
FENCES.**

Iron Ox Hurdle Fence, Iron Sheep Hurdle Fence, Wire Webbing for Sheep and Poultry Yards, Iron Farm Gates, Guards for Stable Divisions, Store Fronts, Factories, &c., Tree Guards, ORNAMENTAL WIRE WORK for Porches, Green Houses, &c.; WIRE RAILING for Cottage, Garden and Cemetery enclosures; Mosquito Netting and every variety of WIRE WORK. Every information furnished by manufacturers.

M. WALKER & SONS,
feb-1y No. 11 N. 6th street, Philadelphia, Pa.

THE SCUPPERNONG GRAPE

And WILD GOOSE PLUM sent FREE for \$1 each; \$9 per dozen; \$50 per hundred. Consignments solicited. Address

IUKA NURSERY,
IUKA, Mississippi.

SPECIALTIES.

PEACH TREES of the best sorts, 1 and 2 years, 3 to 9 feet, \$8 to \$12 per 100. Missouri Mammoth and other Blackberries; Clarke, Philadelphia and other Raspberries, Grapes, Gooseberries, Currants, Rhubarb, &c., warranted of the best quality, and at very low prices. Early Rose, Goodrich and Harrison Potatoes by mail cheap.

DENTON BRO'S, Prospect Hill Nurseries,
Plainfield, N. J.

feb-1t*

TREE SEEDS.

Over 100 kinds, including Apple, at \$12 per bushel, Pear, Cherry, Plum, &c., with latest hints on raising.

HEDGE PLANTS—Finest stock of *Osage Orange* in the East, \$3.50 by the 100,000; \$5 per single thousand, and arrangements special for those who sell again.

NURSERY STOCK—Suited to distant transportation. Near 200 items, including Fruit Stocks, Evergreens, &c.

GOODRICH POTATOES—The best Early \$4.50 per barrel.

Send for lists.

THOMAS MEEHAN,
Germantown, Pa.

feb-3t

SMALL FRUIT INSTRUCTOR.

32 PAGES of plain directions for planting and cultivating, for family as well as market garden, and marketing all Small Fruits. Written from 20 years experience and gives all the information of the larger and more costly works, so as to put new beginners on equal footing with old fruit growers. We have hundreds of testimonials, of which the following from Rev. H. W. Beecher is a sample: "Your directions for growing Strawberries and Raspberries are the best I have ever seen." Price 10 cents. Wholesale and retail lists sent by mail free on application. Address, PURDY & JOHNSTON, Palmyra, N. Y., or PURDY & HANCE, South Bend, Ind.

jan-tf

DO VEGETABLES THINK? A curious and interesting inquiry; Instructions in hunting and trapping, illustrated; Near-sightedness, cause and cure; Choice of business; How to become an author; How to train animals, including many curious, amusing and surprising tricks, illustrated; Magnets and magnetism; "Swiss honey"; Rich men of the world, and how they gained their wealth; Exposures of humbugs, quacks and swindles, by the author of "Rogues and Rogueries"; Trade secrets and money making manufactures; Hints for the household; Family recipes; Games, puzzles, magic and amusements for the young; and choice miscellany for all, in

HANEY'S JOURNAL.

Enlarged with new volume, giving over 1,500 square inches of interesting and instructive reading matter, attractive illustrations, &c., each month for ONLY FIFTY CENTS A YEAR. This is no advertising sheet, trashy catch-penny or "axe grinder"—our aim is to give a first rate, carefully edited, and well printed and illustrated paper, at a very reasonable price. The scarcely perceptible profit on each subscriber pays us on our large circulation. Now is the time to subscribe. Specimens 7 cents by mail, or 5 cents of newsdealers, none free. Try it a year—it will pay you. JESSE HANEY & CO., 119 Nassau street, New York.

feb-tf

\$15.00 Per Year guaranteed and steady employment. We want a reliable agent in every county to sell our *Patent White Wire Clothes Lines (Everlasting)*. Address WHITE WIRE CO., 75 William street, New York, or 16 Dearborn street, Chicago, Illinois.

DEAFNESS, CATARRH, SCROFULA.—A Lady who had suffered for years from DEAFNESS, CATARRH, and SCROFULA, was cured by a simple remedy. Her sympathy and gratitude prompts her to send the receipts free of charge to any one similarly afflicted. Address Mr. M. C. L., Hoboken, New Jersey.

Notice to Farmers, Dairymen and Horsemen!

BREWING, FRONEFIELD & CO'S**VEGETABLE CATTLE POWDER.**

FIRST INTRODUCED IN 1848.

This preparation contains the latest and most approved remedies for all diseases to which Horses, Cattle and Swine are incident. Either as a preventive or as a cure in the early stages of the dreaded disease of Pleuro-Pneumonia or Rinderpest, now making fearful inroads among our Cattle. This POWDER has already achieved reasonable reputation. It is compounded on strictly chemical principles; contains the elements to form healthy blood and generate animal heat, and is warranted to make an increase of at least 25 per cent. in the animal product, either as fat or as milk and butter, upon the same amount of food.

Prepared by

FRED. A. MILLER, Sole Agent,

No. 128 North 4th Street, Philadelphia, Pa.

N. B.—Do not fail to send for a pamphlet giving full particulars.

feb-4t

ORNAMENTAL AND USEFUL.**BUY ONLY
SILVER TIPPED SHOES**

For Children. Will outwear three pairs without tips.

feb-3t

Improved Breeds of Live Stock.

The undersigned, editor of the *Practical Farmer*, having been for many years engaged in breeding, importing and shipping LIVE STOCK to all sections of the United States, is now prepared to execute orders for his PURE WHITE CHESTER HOGS, of which he has shipped large numbers. Also, pure ESSEX and BERKSHIRE HOGS, ALDERNEY, AYRSHIRE, DEVON and SHORT HORN CATTLE, SOUTHDOWN, MERINO and COTSWOLD SHEEP. All the improved breeds of POULTRY—Chickens, Ducks, Turkeys, Geese, &c., all of which will be carefully selected and shipped by express or steamer as directed. Price lists furnished on application, and all communications promptly answered.

PASCHALL MORRIS,

Office of "Practical Farmer,"

18 North 13th street, Philadelphia, Pa.

jan-6t*

NEW AND RARE**VEGETABLES.**

Having been the original introducer of the Hubbard Squash, Marblehead Mammoth Cabbage and many other new things, I still continue to make the raising of the SEEDS of NEW AND RARE VEGETABLES a speciality in addition to the standard kinds.

Catalogues gratis to all.

JAMES J. H. GREGORY,

Marblehead, Mass.

**FOR SALE:**

A thorough-bred Chester White BOAR, 15 months old. Price \$40. Address

A. E. GROFF,

Owings' Mills, Baltimore Co., Md.

jan-tf

FOR COTTON, TOBACCO & OTHER SPRING CROPS OF 1869!

BAUGH'S RAW BONE PHOSPHATE,

Containing 53 per cent. Phosphate of Lime (of which nearly 15 per cent. is soluble), and 5 per cent. of Ammonia.

Many years experience on the varied crops and lands of the South has demonstrated the use of this Fertilizer to be indispensable in the growth of large crops of Cotton, Tobacco and all Cereals and Garden Vegetables, as well as in permanently enriching the soil.

Price in Baltimore \$56 Per Ton.

~~As~~ Sold by Dealers generally.

GEORGE DUGDALE, Manufacturer's Agent,

feb-3t

97 and 105 SMITH'S WHARF, BALTIMORE, MD.

WM. H. LYMAN, IMPORTER AND GROWER OF SEEDS, BULBS AND PLANTS,

Has the pleasure of offering to his Southern friends and the public generally

His Illustrated Floral Guide and Catalogue of Seeds, Plants, &c., for 1869,

Which contains descriptions of 1600 varieties of SEEDS AND PLANTS. It is splendidly illustrated with a large number of elegant wood engravings, and two beautiful colored plates, one of which is the celebrated "MRS. POLLOCK GERANIUM."

In it will be found designs for arranging the Flower Garden, together with full directions for sowing seeds, transplanting, &c. This work is sent free to all my customers, and to all others on receipt of ten cents, which is not one-half the actual cost. Every one should have a copy. One lady says, "I should not be without it if it cost a dollar, for I know of no work which I could obtain that gives so much reading matter for less than fifty cents, saying nothing about the beautiful engravings."

I am also introducing my new TOMATO, the

LYMAN MAMMOTH CLUSTER.

This Tomato is a cross between a French unknown variety and the Lester's Perfected, retaining the smoothness and solidity of the latter, growing in clusters; each stem bearing from six to twelve tomatoes. It is perfectly smooth and nearly round, about the size of a Baldwin apple; color of a rosy pink, and keeps well; solid, has but few seeds, and is no doubt one of the best early varieties we have. It is unexcelled for eating raw, and is delicious for cooking, being very high flavored. In earliness it excels the "Keyes Tomato," and ripens its fruit evenly, about TEN DAYS before the Early Red. ~~It~~ Undoubtedly the best market variety of Tomato in existence.

I shall retail the seed of this Tomato in packets, at 25 cents per package. ~~As~~ For Illustrated circular, containing description, recommendation, &c., address, enclosing two cent stamp,

WM. H. LYMAN,

Seedsman and Florist, Leverett, Massachusetts.

~~As~~ Publishers wishing to insert the above advertisement may address as above, stating terms, &c.

feb-4t

2,000 Barrels Pure Bone Dust.

Warranted Free from Adulteration.

JOHN S. REESE & CO.

We are prepared to supply the Farmers of Maryland and Virginia with BONE DUST, which we warrant and guarantee to be free from

ADULTERATION.

This Bone Dust is not so fine as our Bone Flour, but sufficiently fine to prove active on the first crop. It is prepared in New Orleans for our sales.

We have every cargo subjected to careful chemical analysis, and thus avail of the proper means of protection for ourselves and our patrons.

JOHN S. REESE & CO.

feb-1f

No. 10 South Street, (2d floor) Baltimore, Md.

SPECIAL NOTICE !

APPLES, one year old, for Nursery planting; very low.

APPLES, Dwarf, 2 years old; a fine assortment.

ITALIAN DWARF and other PEACHES.

ORANGES and LEMONS—10 best varieties in pots.

CHERRIES, 2 years old; both first and second class.

CONCORD and CLINTON GRAPES, 2 years; very fine.

FRUIT STOCKS of every description, for Nurserymen.

YOUNG EVERGREENS of every description, for Nurserymen.

New and Rare Hardy SHRUBS; recently imported.

AMERICAN ARBOR VITÆ, for hedging, from 9 to 24 inches.

ROSES in great variety, at reduced rates.

• **WYATT'S LINNÆUS RHUBARB**; true to name; very low.

Dealers will find at this establishment a full line of stock in every department. New Trade List for Spring now ready for distribution. ~~Es~~ Especial attention paid to selecting retail orders.

HOOPES, BRO. & THOMAS,

CHERRY HILL NURSERIES, West Chester, Pa.

feb-2t

BERGER & BUTZ'S
Excelsior Superphosphate of Lime



This valuable Fertilizer took the First Premium at the Agricultural Fairs held at Danville and Staunton, Virginia, in October, 1868, and may be relied upon as the best and cheapest fertilizer for Cotton, Tobacco, Corn, Oats, Wheat, Vegetables, &c.

R. J. RUTH & CO., General Agents,
jan-1 16 Bowly's Wharf, Baltimore, Md.

**VICK'S
FLORAL GUIDE for 1869.**

The first edition of *One Hundred Thousand of VICK'S ILLUSTRATED CATALOGUE of SEEDS and GUIDE IN THE FLOWER GARDEN* is now published. It makes a work of 100 pages, beautifully illustrated, with about 150 FINE WOOD ENGRAVINGS of FLOWERS and VEGETABLES, and an ELEGANT COLORED PLATE,

A BOUQUET OF FLOWERS.

It is the most beautiful, as well as the most instructive Floral Guide published, giving plain and thorough directions for the

Culture of Flowers and Vegetables.

The Floral Guide is published for the benefit of my customers, to whom it is sent free with application, but will be forwarded to all who apply by mail, for Ten Cents, which is not half the cost.

Address JAMES VICK,
jan-2 Rochester, New York.

SITUATION WANTED.

A YOUNG MAN, thoroughly reliable, brought up to business, and a good practical FARMER, wishes a situation as Manager and Superintendent of a good Farm or Plantation, for the Owner.

Apply at office of PRACTICAL FARMER,
jan-2 18 13th St., above Market, Phila.

**GREGORY'S
Seed Catalogue.**

On my three Seed Farms in Marblehead, Massachusetts, where I have over sixty acres in seed, I have raised this season nine varieties of Cabbage Seed, six of Beet Seed, four of Carrot, two of Turnip, twenty of Tomatoes, seven of Corn, five of Onions, eleven of Beans, six of Mangold Wurtzel, and seven of Squash, besides Seeds of numerous other vegetables—all of which were grown perfectly isolated. I offer the opportunity to market gardeners and others who desire to procure as large a proportion of their seeds as possible directly from the grower.

Catalogues gratis to all.

JAMES J. H. GREGORY,
jan-2t Marblehead, Mass.

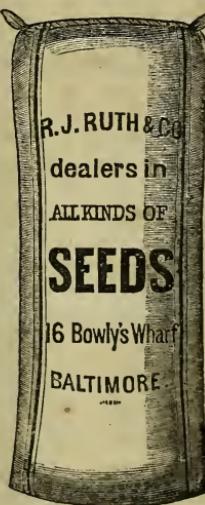
Superior Extra Early Peas.

Black Eye Marrow Peas.

Large White Marrow Peas.

For Sale at the Seed Store of

C. B. ROGERS,
jan-2t No. 133 Market Street, Phila.



CLOVER,

TIMOTHY,

KENTUCKY

Blue Grass,

Red Top

And all other

SEEDS.

Our SEEDS are new, free from weeds, and may be relied upon as the best in the market.

R. J. RUTH & CO.

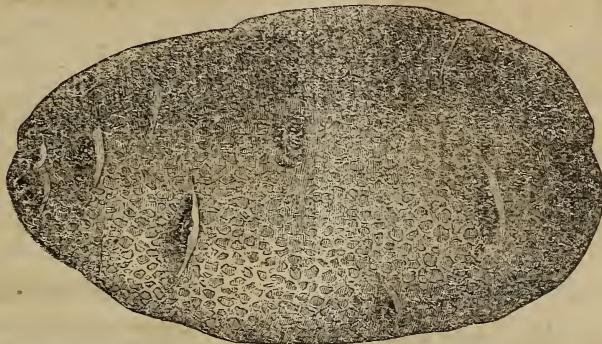
COMMISSION MERCHANTS,

jan-1y 16 Bowly's Wharf, Balto., Md.

SEED! SEED! SEED!

Farmers and Gardeners of Maryland and the Southern States will find at our Warehouse every variety of FIELD AND GARDEN SEEDS adapted to Southern cultivation.

E. WHITMAN & SONS, 22 and 24 S. Calvert Street, Baltimore.



Early Rose Potatoes.

We have succeeded in securing a few barrels of this justly celebrated Potato, which has created so much excitement in the community. Those we have are pure and genuine, and we will sell them at New York and Boston prices, viz: 1 pound for \$1, or \$5 for one peck.

We notice reports, from parties who planted the ROSE POTATO last year, of a yield of one barrel from one pound planted, and that one hundred per cent. is quite common. Address, E. WHITMAN & SONS, 22 and 24 S. Calvert Street, Baltimore, Md.

PRINCE EDWARD ISLAND BLACK OATS

Just received and for sale. Price \$5 per sack of two bushels. Weight 40 pounds to the bushel. Address, E. WHITMAN & SONS, 22 and 24 South Calvert Street, Baltimore, Md.

FERTILIZERS.

The Fertilizer recommended by the farmers of Maryland and Virginia as the best and cheapest is ANDREW COE'S SUPER-PHOSPHATE. Price \$60 per ton of 2,000 pounds. For sale by E. WHITMAN & SONS, 22 and 24 South Calvert Street, Baltimore, Md.

GROUND BONE

Is recommended as an excellent Fertilizer. Price \$45 per ton of 2,000 pounds.

For sale by

E. WHITMAN & SONS,

22 and 24 SOUTH CALVERT STREET, BALTIMORE, MD.

PACIFIC GUANO COMPANY'S

(CAPITAL \$1,000,000.)

SOLUBLE PACIFIC GUANO.

:o:

The value of this Guano is now so *well known and appreciated*, that it does not require further commendation from us.

The Company *owns the Guano Islands*, and other sources of supply from which its raw material is drawn. Hence, this Guano, possessing such high excellence, can be brought into market at a price *not exceeding* that of the ordinary Super-Phosphates of Lime.

The large capital invested by this company affords the surest guarantee of the continued excellence of their fertilizer, as the safety of their capital depends upon continued and permanent business.

Experience has shown that this Guano ripens the Wheat crop from five to six days earlier than the Super-Phosphates.

It is the *policy and purpose* of the Company to furnish the best fertilizer that *enterprise and capital* aided by the best scientific ability, can bring into market, at the *lowest possible cost to consumers*.

JOHN S. REESE & CO.,

General Agents for the Pacific Guano Company.

Principal Office—71 South street, Baltimore.

Branch Office—38 South Delaware avenue, Philadelphia.

jan-tf

JUST PUBLISHED!

:o:

Gardening for the South;

Or, HOW TO GROW VEGETABLES and FRUITS,

By the late WM. N. WHITE, of Athens, Georgia, with additions by Mr. J. Van Buren and Dr. Jas. Camak. New edition, Revised and Illustrated.

BY MAIL (Postpaid) - - - - - \$2

By arrangement with the publishers, we will send a copy of the above valuable work to every person enclosing us \$10, with order for GARDEN SEEDS selected from our New Catalogue, to amount of same, or \$6, with order to amount of \$5.

EDWARD J. EVANS & CO.,

NURSERYMEN AND SEEDSMEN, YORK, PENNA.

THE MARYLAND FARMER.

J. WILKINSON,

Landscape Gardener, Rural Architect
AND CIVIL ENGINEER,
BALTIMORE, MD.,

Gratefully acknowledges the liberal patronage given him in the various branches of his profession, for the past twenty years, a continuance of which he highly solicits. He would inform the public that it is his purpose to continue to make Baltimore his head-quarters, but he will promptly respond to calls from all parts of the country. He will visit places to be improved, or proposed sites of buildings, and furnish plans of the grounds, on which every feature of improvement and decoration will be located to a scale, and specifications furnished which will make the plans intelligible to the inexperienced in the art of landscaping, or he will furnish experienced laborers to execute his plans.

He will design and furnish plans, with full detail drawings and specifications for Public Buildings, Dwellings, Farm Barns and all other farm buildings, Carriage Houses and Stables for both city and country, Gate Lodges, with his magic gate, Dairies, Ice Houses, with dairies and refrigerators attached and Bath Houses.

He will furnish designs with detail drawings for Vaults, Tombs and Monuments, and cemetery work of all kinds, to which special attention will be given.

He will give counsel in every branch of Agriculture, in which he has a thorough practical experience, having been the principal and proprietor of an Agricultural school and experimental farm for eight years. He will furnish plans for buildings of every description, and for Heating and Ventilating buildings of any dimensions or form. In all the above he guarantees satisfaction to his patrons.

Address, 397 W. Fayette St., Baltimore, Md.

THE METHODIST PROTESTANT,

A RELIGIOUS AND FAMILY NEWSPAPER,

Advocating the Mutual Rights of the Ministry and Laity; and containing Essays, Narratives, Biographies, and Local and General Intelligence.

EDITED BY THE BOOK DIRECTORY.

Published weekly at No. 12 North Gay street, at Three Dollars per annum, in advance.

This is an old established Religious Journal. It claims to be an instrument of good in the world; and, upon its general character and usefulness, it goes with confidence before the Christian public for patronage.

It is a purely Religious Journal, carefully avoiding the discussion of political questions, and directing all of its efforts to the advancement of that kingdom which is not of this world.

Persons wishing to subscribe will direct their letters to the agent,

THOMAS W. EWING,
12 N. Gay st., Baltimore.

Warranted Garden Seeds.

OUR NEW DESCRIPTIVE PRICED CATALOGUE FOR 1869

Will be issued about January 1st, and duly mailed to our customers; to others desiring copies it will be sent on receipt of 10 cents.

A large supply of CHOICE SEED POTATOES, NEW BRUNSWICK OATS, and all desirable novelties.

Descriptive priced nursery catalogues mailed applicants. EDWD. J. EVANS & CO.
dec-2t York, Pennsylvania.

JOB PRINTING of every description neatly executed at the office of the "MARYLAND FARMER."

175 ACRES

Planted with Small Fruits.

100 Acres Planted with

WILSON EARLY BLACKBERRY.

A good, large stock of PLANTS of the leading varieties of

BLACKBERRIES, RASPBERRIES,
Strawberries, Currants, Grapes.

ALSO,

ASPARAGUS ROOTS,

Early Rose Potatoes,

&c. &c. &c.

ROOT CUTTINGS by the dozen, hundred, thousand, or million.

Correspondence solicited.

JOHN S. COLLINS,

oct-6t

Moorestown, N. J.

EPILEPSY, OR FITS.

A sure cure for this distressing complaint is now made known in a Treatise (of 48 octavo pages) on Foreign and Native Herbal Preparations, published by Dr. O. PHELPS BROWN. The prescription was discovered by him in such a providential manner, that he cannot conscientiously refuse to make it known, as it has cured everybody who has used it for Fits, never having failed in a single case. The ingredients may be obtained from any druggist. Sent free to all on receipt of their name and address by Dr. O. PHELPS BROWN, No. 19 Grand street, Jersey City, New Jersey.

nov-3t

LUMBER AND LOG BOOK. SCRIBNER'S READY RECKONER, designed expressly for Lumber Merchants, Ship Builders and Farmers, containing the correct measurement of Scantling, Boards, Plank, Cubical contents of Square and Round Timber, Saw Logs, Wood, etc.; comprised in a number of tables, to which are added Tables of Wages by the month, Board or Rent by the week or day, Interest Tables, etc.

This book has been published by me for 20 years or more; it is the most full and complete book of its kind ever published, and has now become the standard book throughout the United States for measuring all kinds of lumber and Logs—over 400,000 copies have been sold, and the demand is constantly increasing. Every one engaged in buying or selling lumber of any kind will find this a very valuable book. This book is for sale by booksellers throughout the United States, and sent by mail post-paid, for thirty cents.

GEO. W. FISHER, Publisher,
Rochester, N. Y.

NO WIND,
DUST,
SNOW,
OR RAIN

Can penetrate where
TORREY'S PATENT WEATHER STRIPS
are used.

Send for Illustrated Circular showing our new
improvements. E. S. & J. TORREY & CO.
dec-2t 72 MaidenLane, New York

E. WHITMAN & SONS,
SEED MERCHANTS,
Nos. 22 and 24 S. Calvert Street,
BALTIMORE, MD.

Our Stock is large with all the varieties of VEGETABLE, GRASS and FIELD SEEDS, pure, fresh and genuine. We name a few of the leading sorts :

CABBAGE.

Premium Flat Dutch and Stone-mason Drumhead, best American grown ; Early and Large Yorks, Savoys, and all other leading varieties.

BEETS.

Long Blood, E. Turnip Blood and Mangel Wurtzel and all other varieties.

CARROTS.

Long Orange, Early Horn and Altringham.

CORN.

All varieties of Early Garden Corn.

PEAS.

Extra Early, D. O'Rourke, Champion of England, Early Kent, Blue Imperial, Marrowfats, Tom Thumb, &c. &c.

RADISH.

All varieties of early and late kinds.

Turnips, Tomatoes, Squash and Pumpkin, Salsify, Cucumber, Parsnip, Melons, Herbs, Flower Seeds, &c., &c.

GRASS SEEDS.

Clover, Timothy, Orchard Grass, Kentucky Blue Grass, Lucerne, Fescues, Rye Grass, Hungarian, Mixed Lawn Grass, Sorgo Seed in variety, Bird Seeds, &c., &c. Prince Edward Island Black Oats, (new,) 40 pounds to the bushel, \$2.50 per bushel.

POTATOES.

Early Rose \$1 per pound, \$5 per peck. Early Goodrich, \$6 per bbl.; all other early and late varieties.

SOMETHING FOR YOUNG AND OLD
IN EVERY HOUSEHOLD.

The Celebrated Patent Craig Microscope

 Is an optical wonder, and combines instruction with amusement. Thousands have been sold, and it has received the highest recommendations from the press and public everywhere, for which see circulars. It distances and defies competition, being made on a different plan from all other microscopes, hence its simplicity, low price and high magnifying power. It is also the only microscope which requires no focal adjustment, therefore it can be readily used by children as well as scientific men. It is adapted to the use of physicians, entomologists, students, the family circle, and to every lover of the beautiful, wonderful and inexhaustible things of nature; for it opens up an endless unseen kingdom to the view of the astonished beholder, where the unassisted eye no beauty sees—thus leading us from nature up to nature's God. It magnifies ten thousand times, a power equal to other microscopes of many times its cost. Reveals the globules in milk, blood and other fluids, solids or salts of urine, animalcules and minerals in water, cancer cells, eels in vinegar, claws and hairs of insects, shape of the pollen of flowers, hundreds of eyes in the single eye of a fly, tubular structure of hair, dust of a butterfly's wing to be perfectly formed feathers, adulterations of food, and also the celebrated *trichina spiralis* or pork worm which has caused so much excitement in this country, and which was first discovered here with this microscope by Dr. R. C. Kendall, of Philadelphia. Price only \$2.50.—Mailed post-paid, for \$2.75. Address

W. F. DAILEY,

jan-3t No. 11 Light Street, Baltimore, Md.

A Self-Acting Household Wonder,

FOR

Washing & Cleansing Clothes,

And all articles of the coarsest or most delicate texture, without the least injury.

NO LABOR! NO WEAR!! NO TEAR!!!

The Fountain Clothes Washer.

This simple invention renders the hitherto most unpleasant of all days, viz., the washing day, comparatively easy and agreeable.

“EUREKA”

Self-Adjusting Clothes Wringer,

The only reliable Wringing Machine in the world.
Steel Elliptic Springs.

They say 'tis small and simple,
Yet it does the million please—
The Eureka ("I have found it,")
Can be worked with speed and ease.

The Eureka is not only a great labor saver, but also saves very much in the wear and tear of garments, clothes lasting as long again as when wrung without this machine, thereby paying for itself in every year's use.

COLLINS & HEATH,

Stove, Furnace and Plumbing House,

22 Light Street, Baltimore.

To all whom it may Concern.

Strawberry, Raspberry and Blackberry Plants of all the Leading Varieties for sale cheaper than ever before offered.

Also, Root Cuttings, Currant and Gooseberry Bushes, Grape Vines, Asparagus Roots and Early Rose Potatoes. All warranted genuine and of the best quality. Persons wishing to plant any of the above would do well to send for a list of our LOW PRICES previous to purchasing elsewhere.

 Satisfaction guaranteed and correspondence solicited.

jan-3t

CHAS. COLLINS,
Moorestown, N. J.

TO THE SEED TRADE.

Our Annual WHOLESALE List of Vegetable, Agricultural and Flower Seeds. Also Gladiolus, Japan Lilies and other Spring Bulbs for 1869, is ready for mailing.

jan-2t J. M. THORBURN & CO.
15 John street, New York.

VEGETABLE and FARM
SEEDS.

Our Annual Descriptive Priced CATALOGUE of KITCHEN GARDEN SEEDS, &c., for 1869, is ready for mailing to applicants.

jan-2t J. M. THORBURN & CO.
15 John street, New York.

CATALOGUES FREE!

M. O'KEEFE, SON & CO.'S
Catalogue of Seeds,

AND GUIDE TO THE
FLOWER and VEGETABLE
GARDEN FOR 1869.

Published in January. Every lover of flowers wishing this new work, free of charge, should address immediately M. O'KEEFE, SON & CO., Ellwanger & Barry's Block, Rochester, N. Y. nov-7t

Raspberries and Blackberries.

Large quantities best quality and varieties for field culture. WILD GOOSE PLUMS, and other FRUIT and ORNAMENTAL TREES.

 Send stamp for catalogue and club rates.

dec-3t

WM. PARRY,
Cinnaminson, N. J.

INTERESTING TO LADIES.

The following extracts are from the testimony, taken under oath, in a recent case pending before the United States Patent Office, upon the actual merits of the

GROVER & BAKER SEWING MACHINE,

and its relative merits as compared with other machines:

Mrs. Dr. McCready, says :

"I have used, for nine years, a GROVER & BAKER MACHINE, and upon it I have done all kinds of family sewing for the house, for my children and husband, besides a great deal of fancy work, as braiding, quilting, and embroidery. During all that time my machine has never needed repair, except when I had the tension altered, and it is as good now as it was the first day I bought it." *

"I am acquainted with the work of all the principal machines, including Wheeler & Wilson's, Finklin & Lyon's, Wilcox & Gibb's, Ladd & Webster's, the Florence machines, and Sloat's machines, besides a number of ten-dollar ones ; and I prefer the Grover & Baker to them all, because I consider the stitch more elastic. I have work now in the house that was done nine years ago, which is still good ; and I have never found any of my friends who have used the other machines able to say the same thing."

Mrs. Dr. Whiting gives the following reasons for the superiority of the Grover & Baker machines over all others :

"The elasticity of the stitch, and ripping when it is required; and also the stitch fastening itself, as you leave off ; and also, the machine may be used for embroidering purposes ; and therein consists the superiority over other machines.

"The stitch will not break when stretched, as the others do, and neither does it draw the work.

"I find this stitch will wear as long as the garments do—outwear the garments, in fact.

"I can use it from the thickest woolen cloth to Nanook muslin."

Mrs. Alice B. Whipple, wife of Rev. Mr. Whipple, Secretary of the American Missionary Association, testifies :

Q. As the result of your observation and experience, what machine do you think best as a general family instrument ?

A. The Grover & Baker, decidedly.

Q. State the reasons, such of them as occur to you, for this opinion.

A. I think the stitch is a stronger stitch than that of any other machine I have used, and it seems to me much more simple in its management than other machines; one great advantage is the ease with which the seam is ripped when necessary to do so; and I think that the work, by an experienced person, on a Grover & Baker machine, is better than the work by such person on any other machine; it requires more skill to work other machines than the Grover & Baker.

Mrs. General Buel says she prefers the Grover & Baker machine over all others.

"On account of its durability of work, elasticity of stitch and strength of stitch. It never rips.

"It is preferred over all others; it is very easy in its movements, and very easily adjusted, and very simple in its construction.

"We can accomplish more in one week, by this sewing machine, than we can in a month by hand-sewing."

Mrs. Dr. Watts, says :

"I have had several years' experience with a Grover & Baker machine, which has given me great satisfaction. Its chief merit is that it makes a strong elastic

stitch ; it is very easily kept in order, and worked without much fatigue, which I think is a very great recommendation. I am not very familiar with any other machine, except a Wheeler & Wilson, which I have had. I think the Grover and Baker machine is more easily managed, and less liable to get out of order. I prefer the Grover & Baker, decidedly."

Mrs. A. B. Spooner, says :

"I answer conscientiously, I believe it to be the best, all things considered, of any that I have known.

"In the first place, it is very simple and easily learned ; the sewing from the ordinary spool is a great advantage ; the stitch is entirely reliable. It does ordinary work beautifully, and the embroidery stitch. It is not liable to get out of order. It operates very easily. I suppose I can sum it all up by saying it is a perfect machine.

"I have had occasion to compare the work with that of other machines. The result was always favorable to the Grover & Baker machine."

Mrs. Dr. Andrews, testifies :

"I prefer it to all other machines I have known anything about, for the ease and simplicity with which it operates and is managed ; for the perfect elasticity of the stitch ; the ease with which the work can be ripped, if desired, and still retain its strength when the thread is cut, or accidentally broken ; its adaptation to different kinds of work, from fine to coarse, without change of needle or tension."

Mrs. Maria J. Keane, of the house of Natalie, Tilman & Co., says :

"Our customers all prefer the Grover & Baker machine, for durability and beauty of stitch."

Mrs. Jennie C. Croly, ("Jenny June,") says :

"I prefer it to any machine. I like the Grover & Baker machine in the first place, because if I had any other I should still want a Grover & Baker ; and, having a Grover & Baker, it answers the purpose of all the rest. It does a greater variety of work, and it is easier to learn than any other. I like the stitch because of its beauty and strength and because, although it can be taken out, it don't rip, not even by cutting every other stitch."

The foregoing testimony establishes beyond question :

1. The great simplicity and ease of management of the Grover & Baker machines.
2. That they are not liable to get out of repair.
3. That a greater variety of work can be done with them than with other machines.
4. That the elasticity of the stitch causes the work to last longer, look neater, and wear better, than work done on other machines.
5. That the facility with which any part of the seam can be removed when desired is a great advantage.
6. That the seam will retain its strength even when cut or broken at intervals.
7. That, besides doing all varieties of work done by other sewing machines, these machines execute beautiful embroidery.

Over one hundred other witnesses in the case above referred to testified to the superiority of the Grover & Baker machines in the points named in substantially the same language, and thousands of letters have been received from parts of the world, stating all the same facts.

 Send for a Circular.

OFFICE AND SALES ROOMS,

181 Baltimore Street,
BALTIMORE.

**TO THE FARMERS & PLANTERS
OF THE
SOUTHERN STATES !**

"EXCELSIOR."

Containing Ammonia,	- - - - -	6 per cent.
Super-Phosphate equivalent to	- - - - -	
Bone Phosphate of Lime,	- - - - -	57 "
Potash of Soda,	- - - - -	5 "

Composed of 700 pounds of No. 1 Peruvian Guano, and 1,300 pounds of *Soluble Phosphate of lime* (bones dissolved in acid,) potash and soda, forming the most concentrated, universal and durable fertilizer ever offered to the farmer and planter—combining all the stimulating properties of Peruvian Guano, and the ever durable fertilizing properties of Ground Bones—supplying an abundance of Ammonia for any crop, and all soils, and in a perfectly fixed condition—not volatile and passing off with the first crop, as with Peruvian and other ammoniacal guanoes, but stimulating the crop to which it is applied, and all succeeding ones, giving to poor, worn out and unproductive soils, new life and vigor, making them, in this respect, equal to the most highly cultivated lands, upon which much time and money have been expended.

We introduced Excelsior in 1858, and challenge the manufacturers and venders of fertilizers, natural or artificial Guano, to show results so invariably successful as can be shown from its use. One of our firm superintends in person every minutia of its manufacture. We therefore warrant every bag uniform, and to contain by analysis, the standard of fertilizing properties, giving that protection to the farmer which he does not have in the purchase of any other Guano or Fertilizer sold.

Excelsior is in fine dry powder, prepared expressly for drilling, and can be applied in any quantity per acre, however small; and it is the opinion of the most prominent and calculating Planters, after eight years experience in testing it side by side with other popular fertilizers, that an application of 100 pounds per acre of Excelsior is equal

to from 200 to 300 pounds of any other fertilizer or guano offered for sale, therefore is fully 100 to 200 per cent. cheaper.

We are daily in receipt, from every quarter, of flattering encomiums from those who used it last spring and summer on cotton, corn and tobacco, and last fall on wheat, and had we the space could publish hundreds of testimonials, many from gentlemen who have continued its use year after year since its introduction.

The best evidence we can offer of the value of our Excelsior as a crop grower and fertilizer, is the fact of its being imitated and counterfeited in this and other cities. Some unprincipled manufacturers have actually used our trade mark for the purpose of palming off their worthless compounds.

EVERY BAG BRANDED AS FOLLOWS:



Farmers should see that every bag bears in red letters the name of J. J. TURNER & CO. under the inspection mark, and thus secure the genuine article.

J. J. TURNER & CO.,

42 Pratt Street, Baltimore, Md.

THE MARYLAND FARMER.

DISSOLVED BONES.

(SUPERPHOSPHATE,)

PREPARED BY OURSELVES

Containing 15 Per Cent. Soluble Phosphoric Acid.

One ton is equal to three tons of any other Super-Phosphate offered for sale. In fine, dry powder for sowing or drilling in with the Grain.

 PRICE \$56 PER TON.

J. J. TURNER & CO.,

42 PRATT STREET,

BALTIMORE.

J. J. TURNER & CO.'S

AMMONIATED

BONE SUPER - PHOSPHATE,

Containing nearly 3 per cent. of Ammonia, dry and in good order for drilling. Very high encomiums have been paid its efficacy in the growth of Cotton, Corn, Tobacco and Wheat the past three years.

J. J. TURNER & CO.

42 Pratt Street, Baltimore.

SEEDS! SEEDS!! SEEDS!!!

:o:
E. WHITMAN & SONS

Are now receiving by each of the regular steamers of the Baltimore and Liverpool line
their stock of

FIELD AND GARDEN SEEDS,

Grown for them in England and on the Continent of Europe,

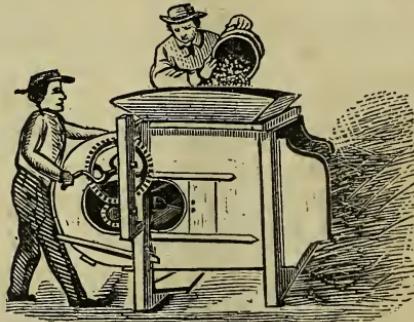
Which, together with their AMERICAN GROWTH OF FIELD AND GARDEN
SEEDS, will make the largest and best assortment ever offered in this market, and will
enable them to compete with any house in this country.

 Send for circulars, and direct to

E. WHITMAN & SONS,
22 and 24 South Calvert Street, Baltimore, Md.

Montgomery's Rockaway Wheat Fans.

Awarded 115¹/2 Premiums.



8 Silver Medals.

We are the sole manufacturers of this justly celebrated FAN which has proved itself by many trials to be superior to any other yet invented.

It has in late contests obtained premiums over several Fans claiming to be improvements over the Rockaway, and now stands unequalled by any other Fan in the country.

Any person who has ever used one will give as good a recommendation as we could wish.

EXCELSIOR WHEAT FAN.

We have sold a great many of these Fans during the last two seasons and can recommend them as being a good article. Having bought out the manufacturer's entire stock, consisting of over five hundred Fans, at an exceedingly low price, we can offer them at a much less figure than at which they could otherwise be sold.

Price.....\$30 00

"Having dissolved my connection with the firm of Montgomery, Slade & Co., I have made arrangements with Messrs. Whitman & Sons, who will have sole control of my Patent Rockaway Wheat Fans, and I hereby request my former customers to forward their orders to them, assuring them that the Fans will be made under my own supervision."

J. MONTGOMERY.

E. WHITMAN & SONS,
22 and 24 South Calvert street, Baltimore, Md.

BONE DUST.

THE PURE ARTICLE ONLY.

NO ADULTERATION.

Farmers and Gardeners cannot be too careful in purchasing their Manures, as they are obliged to depend entirely on the character of the manufacturer for the quality of the article sold. None but Chemists can detect a mixture in Bone Dust.

The Subscriber has always on hand at

MARKET PRICE,

A large supply of the same kind of Bone Dust that he has been manufacturing for the last

TWENTY YEARS.

JOSHUA HORNER,

Cor. Chew and Stirling Sts.,
Baltimore, Md.

aug-6m

LANGSTROTH'S
PATENT
Movable Comb Bee Hive.



Patent Extended for 7 years from Oct. 1866.

Territorial rights, and hives of the above patent, with comb guides of his own patent, and surplus honey arrangements, may be had on application to the undersigner, owner of the Langstroth patent, for the States of Maryland, Delaware and part of Ohio.

RICHARD COLVIN,

may-6t No. 77 E. Baltimore St. Balt.

N. B.—The public are cautioned against purchasing or using HIVES containing Moveable Comb Frames, which infringe in whole or in part the rights secured in the above patent.

R. C.

HENRY GIBSON,

MANUFACTURER OF

TUBULAR DRAINS,

IN GLAZED STONEWARE.

ALSO,

DRAIN TILES.

LOCUST POINT,

Baltimore.

apr-6m

"FLOUR OF BONE."

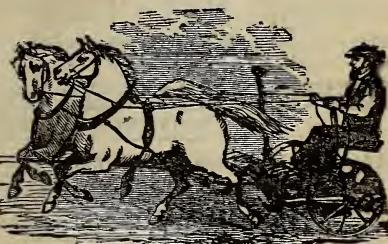
We will give a money guarantee of the *purity* of this article. It is pure *unsteamed, unburnt bone*, reduced to the *fineness* of *flour*, which adds 100 per cent. to its value. It is as *quick* and *active*, as acid *dissolved bone*, hence its value is vastly greater, because it contains neither acid nor water, which necessarily add weight, and reduce the quantity of valuable elements. We recommend 250 pounds to be used in place of 300 pounds Super Phosphate or dissolved bone.

JOHN S. REESE & CO.,

General Agents for the South,
71 South Street, Baltimore.

BUCKEYE MOWER & REAPER.

STILL THE CHAMPION MACHINE.



Awarded First Premiums at the most extensive Field Trials ever held in any country. Manufactured by the Incorporated Company of

C. AULTMAN & CO.

Canton, Ohio.

For circulars, &c., apply to
JAS. BRUSTER,
General Southern Agent,
77 North street, Baltimore, Md.

may-ly

IMPORTANT TO FARMERS !

SUPER PHOSPHATES.

THE MARYLAND FERTILIZING AND MANUFACTURING CO.

Incorporated January, 1867.

DIRECTORS.

W.M. G. HARRISON,
LAWRENCE SANGSTON,
ROBERT TURNER,

WILLIAM TREGO,
Manufacturing Chemist.

WILLIAM NUMSEN,
RICHARD J. BAKER,
WILLIAM TREGO.

LAWRENCE SANGSTON,
President.

This Company, incorporated by the Legislature of Maryland for the Manufacture and Sale of Fertilizers, are now prepared to furnish the Agricultural community with their products.

Deriving their supply of material from the richest of the recently discovered deposits of Bone Phosphates in South Carolina, they have established, and will inflexibly maintain, a higher standard of Fertilizing value than any similar production hitherto on the market.

While the material they use contains 60 per cent. of Bone Phosphate of Lime, it is guaranteed to contain a larger percentage of SOLUBLE PHOSPHATE than any heretofore used.

FINE GROUND BONE PHOSPHATES, Price \$30 Per Ton, in Bags.

Containing, by the average of the Analyses of Professors Piggott, Leibig and Popplein, 60.20 per cent. of Bone Phosphate of Lime.

The unusual percentage of Soluble Phosphate will make this form very desirable to Farmers who prefer to use it in its natural state, or to manipulate for themselves.

ALKALINE SUPER PHOSPHATE, price \$50 per ton, in Bags.

This preparation has special reference to the growth and development of the Seed or Grain, and is intended for soils that produce large crops of Straw, and small crops of Grain.

AMMONIATED SUPER PHOSPHATE, PRICE \$55 PER TON, IN BAGS.

Adapted to lands that require a full development of the crop, both Straw and Grain.

TOBACCO FOOD, price \$60 per ton, in Bags.

A speciality for the Tobacco Plant, rich in Ammonia, Potash and Nitrates, but adapted to all Plants that require a prompt and vigorous growth.

The Superiority of the South Carolina Phosphate is fully demonstrated by the fact that most of the leading manufacturers of Artificial Fertilizers are now using, or making arrangements to use it, as the Phosphatic base of their preparations, and large quantities are being shipped to Europe.

The various preparations of the Maryland Fertilizing and Manufacturing Company are made under the personal supervision of a Manufacturing Chemist of thirty years' experience, and are confidently recommended to the Agricultural community.

LAWRENCE SANGSTON, President,



E. FRANK COE'S AMMONIATED SUPER-PHOSPHATE.

SUPERIORITY GUARANTEED.

Having been appointed agents for the State of Maryland of this valuable fertilizer, we are prepared to furnish it in quantities to suit.

PRICE \$55 PER TON.

JOHN MERRYMAN & CO.

Office, 69 West Fayette Street, Baltimore, Md.

PERUVIAN GUANO delivered direct from the Agent's Warehouse.

DISSOLVED BONES and other articles of known value.

JOHN MERRYMAN & CO.

DOTY'S WASHING MACHINE.

Lately much Improved,



AND THE NEW

Universal Clothes Wringer

improved with ROWELL'S PATENT DOUBLE COG-WHEELS, and the PATENT STOP, are now unquestionably far superior to any apparatus for washing clothes ever invented, and will save their cost twice a year, by saving labor and clothes.

Those who have used them give testimony as follows:

"We like our machines much; could not be persuaded to do without it, and with the aid of Doty, we feel that we are masters of the position."—Rev. Bishop Scott, M. E. Church.

"It is worth one dollar a week in any family."—N. Y. Tribune.

"In the Laundry of my house there is a perpetual thanksgiving on Mondays for the invention of your excellent wringer."—Rev. Theodore L. Cuyler.

"Every week has given it a stronger hold upon the affections of the inmates of the laundry."—New York Observer.

"I heartily commend it to economists of time, money and contentment."—Rev. Dr. Bellows.

"They save three-fourths of the labor and time, and pay for themselves, both in money and contentment."—New Orleans Picayune.

"Friend Doty—Your last improvement of your Washing Machine is a complete success. I assure you your Machine, after a year's use, is thought more of to-day than ever, and would not be parted with under any circumstances."—Solon Robinson.

PRICES.

Send the retail price Washer, \$14, extra Wringer, \$9, and we will forward either or both machines, free of freight, to places where no one is selling; and so sure are we they will be liked, that we agree to refund the money if any one wishes to return the machines free of freight, after a month's trial according to directions.

Canvassers with exclusive right of sale make money fast selling them.

Sold by dealers generally, to whom liberal discounts are made.

R. C. BROWNING, Gen. Agent,

dec-3t

33 Cortlandt street, New York.



THE IMPROVED OHIO CHESTERS.

THE MODEL HOG OF AMERICA.

Enclose stamp for its description, and a variety of other Thorough-bred and Imported stock, including Cashmere Goats, Cattle, Sheep, and the celebrated pure White Holland Turkey, Black Java and Creve-coeur Fowls, with many others.

sep-tf

L. B. SILVER, Salem, O.

SAWS.

MARYLAND SAW MANUFACTORY.

HENRY C. BROWN & CO.,

Manufacturers of every Description of

CAST STEEL SAWS,

ON THE MOST APPROVED PRINCIPLE.

UHLER'S ALLEY, 1 door from Charles,
Between Lombard and Pratt Streets.

And 85 N. FRONT STREET,

BALTIMORE.

Circular, Mill, Cross Cut, Pit, Hand, and Wood Saws. Saws of every description repaired. An assortment of Saws of superior quality and of every description always on hand. Orders executed with punctuality and dispatch. je-ly

FRUIT AND ORNAMENTAL Trees, Plants, Vines, Shrubs, &c.

Cultivated and for sale by

E. A. BAGLEY,

At the

TIMBER HALL & DRUID HILL PARK NURSERIES

BALTIMORE, MD.

25,000 PEACH, one and two years old—from bud. 15,000 APPLES, 6 to 10 feet high. 10,000 PEARs and CHERRIES. Small Fruits in large or small quantities. Apple Seedlings for root grafting. PEACH SEED \$3 per bushel.

nov-tf

OFFICE, 102 LIGHT STREET,

(With B. G. Keene & Co.)

BARGAINS

IN

NURSERY STOCK.

Grape Vines, Blackberries, Raspberries, Strawberry, Currant and Gooseberry Stock for sale cheap, by the 100, 1,000 or 10,000.

100,000

APPLE SEEDLINGS
FOR SALE.

Concord, Diana, Clinton, Catawba, and Hartford Prolific Cuttings cheap by the quantity.

 Send for price list.

Address G. W. WILSON & CO.
aug-tf Bendersville, Adams Co., Pa.

Choice Fowls, Ducks and Turkeys.

 I have for sale several varieties of the most Choice and Pure Bred FOWLS, DUCKS and TURKEYS to be found in the country.

Address, with stamp, C. P. NETTLETON,
aug-ly Box 530 Birmingham, Connecticut.

GEO. W. McLEAN,
COMMISSION MERCHANT,

And dealer in

Agricultural Implements, Produce,
FERTILIZERS, &c.

COCKEYSVILLE, MD.

REFERS TO

Messrs. Jno. Merryman & Co., Baltimore Md.
" Jno. W. Ross & Co. " "
Wm. H. McLean, Esq. " "
Sam'l. L. Worthington, Esq., Cockeysville, Md.
Thos. L. Worthington, Esq. " "
oct-ly

10,000 KITTATINNY
BLACKBERRY PLANTS,

For \$400. Address

GRANVILLE S. PERRY,

oct.

Georgetown, Conn.

NEW BRICK MACHINE.

For tempered clay—common labor only required—worked by one man—makes 500 an hour, \$110—by a horse, 800 an hour, \$300—1,200 an hour, \$400—by steam, 2,000 an hour, \$500—3,000 an hour, \$700.

DRYING TUNNEL

For drying in twenty-four hours Bricks, Fruit, Vegetables, Broom Corn, Hops, Lumber, Pea-nuts. Bricks moulded one day go into the kiln the next all the year.

HOT BLAST KILN, by which one-half the fuel is saved—220,000 bricks have been burned with 53 cords.

REVOLVING SEPARATOR, which pulverizes the clay, and frees it from stone. A piece of limestone, the size of an acorn, will burst a brick.

For further particulars, in a pamphlet (eighth edition, enlarged) giving full instructions on brick setting and burning, with wood or coal, address, sending 25 cents,

FRANCIS H. SMITH,
P. O. Box 556,
Baltimore, Md.

THOMAS DAILY,

Manufacturer of



Saddles, Harness & Collars

No. 76 NORTH CALVERT STREET,

Near Pleasant St.

BALTIMORE, MD.

 A large assortment of BITTS, STIRRUPS, GIRTHS, &c., always on hand.

 Orders from the country promptly attended to.

oct-ly

HARRINGTON & MILLS,

SUCCESSORS TO SAMSON CARISS & CO.

140 Baltimore Street,

Manufacturers and dealers in

Mantle and Pier Mirrors, Bases, Cornices, Picture Frames,

And all descriptions of Framing and Gilt Work, French and German Looking-Glass Plates.

Fine English, French and German ENGRAVINGS—a large stock constantly on hand.

HOUSE FURNISHING ARTICLES
in great variety.

Chandeliers and Gas Fixtures.

PLATED ALBATA Forks, Spoons, Ladles, Castors, Tea Sets, Liquor Stands, Urns, &c. Ivory and Bone Handle Table and Desert Knives & Forks, Carvers, Steels, Butcher and Bread Knives, &c.

Planished, Japan and common TIN WARE, in all its varieties.

Wooden Ware, fine and common Hardware, Baskets, Willow Ware, Door Mats, &c.

Sweep, Hand and Dust Brushes; Feather Dusters of all descriptions.

Waiters and Tea Trays, all sizes and varieties.

Devonshire Portable Carpet and Sewing Chairs, Table Mats, Napkins, Rings, Knife Boxes, &c.

Cedar Chests of all sizes.

Refrigerators of the Dr. Kane and Waterman's Pat-

ent

THE MARYLAND FARMER.

THE FARMERS' FAVORITE!

GREATLY IMPROVED.

BICKFORD & HUFFMAN'S
WORLD RENOWNED PREMIUM

GRAIN DRILL,

WITH THE IMPROVED GUANO ATTACHMENT & GRASS SEED SOWER.

Patented April 22, 1856.

New Pat. Mar. 19, 1867

Re-Issued May 18, 1858.



OF THE

CONTINUOUS

Patented Aug. 18, 1858.

Grain Distributor.

The Desideratum of Seeders !

Perfect in Mechanical Construction !

Perfect in its Performance of Work !

Sowing all grains, from the coarsest Marrowfat Peas to the finest kerneled, *with accuracy*. Thistle balls and dirt do not clog it. Seeding an even continuous stream through each tube; performing equally well up hill or down, side hill or level.

No Bunching of Grain !

No Liability to Get Out of Order or Broken !

Built as a plain Grain Drill or with Compost or Seed Attachment.

For one of these incomparable Machines, address

W. L. BUCKINGHAM, General Agent,

59½ SOUTH CHARLES STREET, BALTIMORE, MD.

PRICES---Delivered on Boat or Cars at Baltimore.

8	Tube Grain Drill,	- - -	\$ 85 00	9	Tube Grain Drill, with Guano or Plas-	- - -	\$130 00
9	"	"	90 00		ter Attachment,	- - -	
8	"	with Guano or Plas-	125 00		Grass Seed Attachment to either of the	- - -	10 00
		ter Attachment,			above,	- - -	

TERMS CASH—or endorsed Notes, due in four months, with interest.

Note—The purchaser pays the Freight in all cases.

SINCLAIR & CO.

MANUFACTURERS OF

AGRICULTURAL IMPLEMENTS AND MACHINERY,

GROWERS AND IMPORTERS OF

GARDEN & FIELD SEEDS,
Nos. 58, 60 and 62 LIGHT STREET,
BALTIMORE, MD.

We have on hand the following Labor Saving Machines, which will, at all times, be sold at the lowest market prices.

Viz: Patent Screw Propeller ; Straw, Hay and Fodder Cutters, for both Hand and Horse Power ; Patent Masticator, for Straw, Corn Stalks and Sugar Cane ; Hand and Horse Power ; Corn Shellers, Plantation Grist Mills, Corn and Cob Crushers, Hay Presses, Sugar Cane Mills, Lime Spreaders, Horse Powers and Thrashers, Wheat and Rice Fans, Plows, Harrows, Cultivators, &c., &c.

PLOW AND MACHINE CASTINGS.

R. SINCLAIR & CO.

de-tf

Pennsylvania Agricultural Works,

Factories, Planing Mill, Foundry and Lumber Yard,
NORTH DUKE STREET, NEAR THE DEPOT,

YORK, Pennsylvania.

A. B. FARQUHAR, Manager & Proprietor.

Agricultural Implement Department

Is one of the largest in the country, and is supplied with Steam Power and every facility for manufacturing, with all the latest and most improved MACHINERY, TOOLS, PATTERNS, FOUNDRY, and LUMBER YARD. With these advantages for manufacturing and supplying Farmers and Dealers, I respectfully solicit their orders, confident of giving perfect satisfaction. I would respectfully call the attention of the public to my Polished Steel Plows, Cultivators, Pelton Triple Geared Horse Powers, Reapers & Mowers, Threshers and Cleaners, Spring Tooth Horse Rakes, &c. &c.

CULTIVATORS.

Made of the best white oak, with 5 or 6 polished steel Plain or Reversible Teeth. It is adjustable to any required width and depth, and the teeth being like the plow, of polished steel, clean themselves readily and cut the weeds and briars instead of passing over them. It is much more satisfactory, and, because more durable, cheaper than the old style.

Special attention paid to supplying the trade with every variety of STEEL WORK—Cultivator Teeth, Plow Moulds, &c., &c.

feb-ly

Threshing & Separating Machines

For Separating, Cleaning and Bagging Grain, at one operation.

This machine has been in use for about 10 years some of them having threshed more than a hundred thousand bushels grain, and owing to its strength, simplicity and completeness of its operations, is universally acknowledged to be the Best in Use. It is the only machine that bags the grain clean enough for market. Being provided with a self-regulating blast and other improvements for saving all the grain, it will pay for itself, over any other Separator, in a few years.

HORSE POWERS.

I am manufacturing the celebrated PELTON TRIPLE GEARED HORSE POWER of all sizes, 3 to 10 horse. The Castings are made in my own Foundry, of the very best Iron, and I will warrant this Power to run easier and bear double the strain of any other in use.

PLOW HANDLES.

Having an Improved Blanchard Lathe and other machinery for manufacturing Plow Handles on a large scale I can supply the trade with all varieties of No. 1 Plow Handles at the shortest notice.

MORO PHILLIPS'

GENUINE IMPROVED

SUPER-PHOSPHATE OF LIME

STANDARD GUARANTEED.

For sale at Manufacturer's Depots,

No. 27 North Front Street, Philadelphia,

AND

No. 95 South Street, Baltimore.

And by Dealers in general throughout the country.

The SOMBRERO GUANO of which MORO PHILLIPS' PHOSPHATE is and always has been manufactured, (and of which he has sole control for the United States,) contains fifty per cent. more Bone Phosphate than Raw Bone, therefore it is more durable. The addition of Ammonia gives it greater fertilizing value.

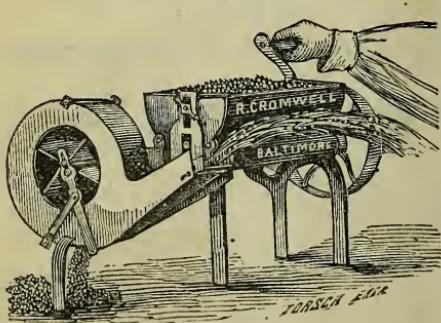
Over six years' experience has proved to the farmer that it makes a heavier grain than even stable manure, and is not only active but lasting.

Price \$56 per ton—2,000 pounds. Discount to dealers.

MORO PHILLIPS,

mar ly Sole Proprietor and Manufacturer.

McDOWELL & BAECHTEL P A T E N T Family Hominy Mill, WITH FAN ATTACHMENT.



This FAMILY HOMINY MILL was invented seven years since, and has constantly been improved until it is a perfect Machine. It combines in its manufacture durability, strength, reliability and simplicity. It is considered the best Mill of its kind made in America. Hundreds of farmers in all the States testify to its making the very best Table Hominy, and say it is a complete success, and that every farmer should buy one. As EXCLUSIVE SOLE AGENT for the United States, I keep constantly on hand a full stock of the above Mills. The trade supplied at liberal discount. Full directions accompany each Mill. Retail price, in Baltimore, for each Mill, \$8.

RICHARD CROMWELL,
35 SOUTH ST., BALTIMORE, MD.

Dealer in Agricultural Implements, Field and Garden Seeds, and Proprietor of Patapsco Nursery.

dec 31

The Merchants' Protective Union

MERCANTILE REFERENCE REGISTER.

THE MERCHANT'S PROTECTIVE UNION, organized to promote and protect trade, by enabling its subscribers to attain facility and safety in the granting of credits, and the recovery of claims at all points, have to announce they will, in September, 1868, publish in one large quarto volume:

THE MERCHANT'S PROTECTIVE UNION MERCANTILE REFERENCE REGISTER, containing, among other things, the Names, Nature of Business, Amount of Capital, Financial Standing; and Rating as to Credit, of over 400,000 of the principal merchants, traders, bankers, manufacturers, and public companies, in more than 30,000 of the cities, towns, villages, and settlements throughout the United States, their territories, and the British Provinces of North America; and embracing the most important information attainable and necessary to enable the merchant to ascertain at a glance the Capital, Character, and Degree of Credit of such of his customers as are deemed worthy of any gradation of credit, comprising, also, a *Newspaper Directory*, containing the title, character, price, and place of publication, with full particulars relative to each journal, being a complete guide to the press of every county in the United States.

The reports and information will be confined to those deemed worthy of some line of credit; and as the same will be based, so far as practicable, upon the written statements of the parties themselves, revised and corrected by well-known and reliable legal correspondents, whose character will prove a guarantee of the correctness of the information furnished by them, it is believed that the reports will prove more truthful and complete, and, therefore, superior to, and of much greater value, than any previously issued.

By aid of the MERCANTILE REFERENCE REGISTER, business men will be enabled to ascertain, at a glance, the capital and gradation of credit, as compared with financial worth, of nearly every merchant, manufacturer, trader, and banker, within the above-named territorial limits.

On or about the first of each month, subscribers will also receive the *Monthly Chronicle*, containing, among other things, a record of such important changes in the name and condition of firms, throughout the country, as may occur subsequent to the publication of each half-yearly volume of the MERCANTILE REFERENCE REGISTER :

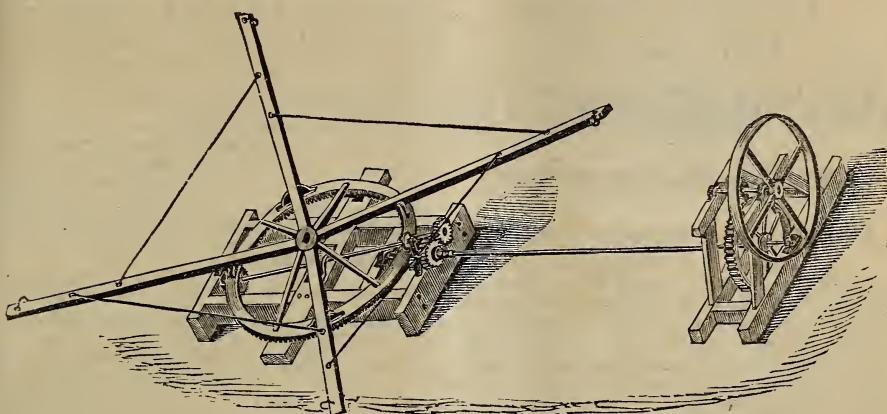
Price of The Merchants' Union Mercantile Reference Register, fifty dollars, (\$50,) for which it will be forwarded to any address in the United States, transportation paid.

Holders of five \$10 shares of the Capital Stock, in addition to participating in profits, will receive one copy of the MERCANTILE REFERENCE REGISTER free of charge; holders of ten shares will be entitled to two copies; and no more than ten shares of the Capital Stock will be allotted to any one applicant.

All remittances, orders, or communications relative to the book should be addressed to the Merchants' Protective Union, in the American Exchange Bank Building, No. 128 Broadway, (Box 2566,) New-York.

sep-ly

Horse Powers and Threshing MACHINERY.



WHITMAN & SONS' DOUBLE GEARED POWER.

Among the great variety of Horse Powers now in use in our country, there is none more simple or more durable than this. It runs lighter and will do more work, with the same number of Horses, than any machine in use, and we can confidently recommend it as the best and most desirable machine in the market.

PRICES.

Whitman's Double Geared Horse Power, (the most substantial power made,)	\$175	Whitman's Two Horse Railway Power.....	175
Pelton Triple Geared Power, 10 horse.....	125	" One "	140
" " 8 "	120	" 24 Inch Premium Iron Cylinder Thresher	80
" " 6 "	110	" 20 " " " "	70
" " 4 "	90	Straw Carrier for either size Thresher.....	25

GRAPE VINES & GRAPE WOOD,

GROWN AT

AZADIA VINEYARD,

NEAR WASHINGTON, D. C.

A large stock of splendid one and two year old GRAPE VINES of the following varieties: Adirondac, Delaware, Concord, Iona, Rogers' Hybrids, Salem, &c. These vines are layers, and one and two eye cuttings, grown in the open air.

These vines and grape wood will be sold very low. For further particulars apply to

DR. JOHN B. KEASBEY,
may-ly 312 F Street, Washington, D. C.

10,000 CONCORD LAYERS,

2 YEARS OLD FOR \$400.

Address GRANVILLE S. PERRY,
pet Georgetown, Conn.

GEO. P. ROWELL & CO.

Advertising Agents

No. 40 Park Row, New York.

Messrs. GEO. P. ROWELL & CO. are Agents for

THE MARYLAND FARMER,

and the most influential and largest circulating Newspapers in the United States and Canadas.—They are authorized to contract for us at our lowest prices.

nov-tf

PURE BRED FOWLS
AND
Chester White Pigs.

Wholesale and Retail Price List sent free.

Address J. D. RICHARDSON & CO.

sep-6t Buckeystown, Md.

**ATTENTION
TOBACCO PLANTERS, FARMERS,
AND
VEGETABLE RAISERS!**

**WILSON'S
AMMONIATED SUPERPHOSPHATE & LIME
AND
WILSON'S TOBACCO GROWER.**

The Cheapest and Best Fertilizer in the Country.

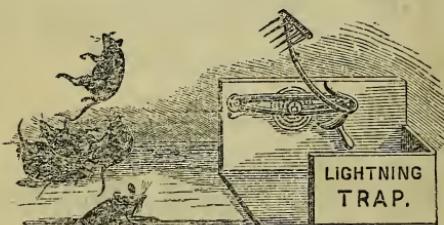
It has raised good crops of Wheat, Corn, Oats, Potatoes, Grass, Tobacco and Vegetables of all kinds. We have certificates which we can show and refer to those who have used it, but the best certificate of any fertilizer is the experience and trial of the farmer, its effects upon the crops, and the soil observed, as he and neighbors use it year after year; any fertilizer that will continue to stand this test may be safely pronounced to be good. We believe this has genuine merit in it. We think it will stand the above test—the only one that is of any value—and we are willing to abide the result. Give it a trial.

DUVALL & IGLEHART,

SOLE AGENTS,

128 Light St. Wharf, cor. Conway,
Baltimore, Md.

jy-ly



Agents Wanted Immediately,

To sell the LIGHTNING TRAP, a new and wonderful invention. It is first wound up like a clock; then it kills Rats, Gophers, Squirrels, Mice, &c., throws them away, and sets itself as quick as its name indicates. One trap and terms to agents will be sent by express on receipt of one dollar.

Address LIGHTNING TRAP CO.
jan-6t 95 Mercer Street, N. Y.

Early Rose Potatoe

1 pound, \$1. 3 pounds, \$2. 2 dozen Clarke Raspberry Plants, and 1 pound Early Rose Potatoes, \$6. Can be sent by mail to any part of the United States.

Address, GRANVILLE S. PERRY,
oct Georgetown, Conn.

Watches, Jewelry, &c

LARMOUR & CO.

NO. 10 LIGHT STREET,

OPPOSITE THE FOUNTAIN HOTEL,

BALTIMORE, MD.

Have this day opened their new stock, comprising CHRONOMETER WATCHES, TIMING WATCHES, ENGLISH WATCHES, AMERICAN WATCHES, LADIES' WATCHES.

We also offer

WM. B. LARMOUR'S NEW COMBINATION WATCH. Made on purely scientific principles, and considered the best timekeeper now for sale in the country. WEDDING PRESENTS OF

FINE JEWELRY, &c., Diamond, Pearl, Coral, Etruscan, Garnet, Enamelled and other styles.

LADIES' BRACELETS, CHAINS, NECKLACES, &c. GENTLEMEN'S SEAL RINGS, GUARD AND VEST CHAINS,

SLEEVE BUTTONS, ETC. WEDDING RINGS, ETC. STIRLING SILVER WARE OF ALL KINDS.

TRIPPLE PLATED WARE, Consisting of Tea Sets, Ice Urns, Waiters, Cups, Goblets, Castors, Knives, Butter Dishes, Pudding Dishes, Flower Vases, Fancy Pieces, Ladles, Spoons, Forks, &c.

AGENTS FOR THE MERIDEN CO'S NEW PORCELAIN LINED PATENT ICE PITCHER,

The very best Pitcher now in use. ENGLISH TABLE CUTLERY, OPERA GLASSES,

SPECTACLES AND EYE GLASSES, PARLOR, OFFICE, LIBRARY, DINING ROOM AND KITCHEN CLOCKS.

HAIR JEWELRY manufactured to order at short notice. Watches and Jewelry repaired in the best manner.

PRICES LOW FOR CASH nov-ly

PAINTS FOR FARMERS AND OTHERS.—

The Grafton Mineral Paint Co. are now manufacturing the Best, Cheapest and most Durable PAINT in use; two coats well put on, mixed with pure Linseed Oil, will last 10 or 15 years; it is of a light brown or beautiful chocolate color, and can be changed to green, lead, stone, drab, olive or cream, to suit the taste of the consumer. It is valuable for Houses, Barns, Fences, Carriage and Car Makers, Pails, and Wood-ware, Agricultural Implements, Canai Boats, Vessels and Ships' Bottoms, Canvas, Metal and Shingle Roof's, (it being Fire and Water Proof,) Floor Oil Cloths, (one Manufacturer having used 5,000 barrels the past year,) and as a paint for any purpose is unsurpassed for body, durability, elasticity and adhesiveness. Price \$6 per barrel of 300 pounds, which will supply a farmer for years to come. Warranted in all cases as above. Send for a circular which gives full particulars. None genuine unless branded in a trade mark Grafton Mineral Paint. Address

dec-6m DANIEL BIDWELL,
254 Pearl Street, N. Y.

SAMUEL PHILLIPS,

AGENT FOR

AGRICULTURAL IMPLEMENTS

And Labor-Saving Machines of all kinds.

KEEP CONSTANTLY ON HAND

A full supply of RIDING PLOWS, GANG PLOWS, Steel Plows, Cast Iron Plows, Double Shovels, Harrows, etc. Takes orders for Grain Drills, Reapers and Mowers of the latest and most approved patterns, Threshing Machines, etc., etc. Also, SEEDS and FRUIT TREES.

Apply at the Postoffice, Kosciusko, Attala Co., Miss.

Agent for the "MARYLAND FARMER." nov if

NAVASSA GUANO,

The only reliable source of Rich Bone Phosphate of Lime.

The attention of manufacturers of Artificial Manures and agriculturists is called to the following analysis of Navassa Guano. The fact alone of a good and increasing market having been found in Europe for this guano, whilst none of the many Phosphates for sale in this country can there find a purchaser, speaks as favorably for the richness and reliability of our guano as it is possible, and the further fact that it is the base of nearly all the well known Artificial Manures now manufactured, and the recommendation of it by such men as Prof. Voelcker, Sibson and Liebig, is sufficient guarantee to the user that by its selection he has obtained the richest Phosphatic Material extant. We guarantee the guano to contain a given amount of Bone Phosphate of Lime, to be analyzed upon arrival by any competent chemist the purchaser may select. Supplying the trade with this Guano in fine powder, packed in strong bags, containing twenty per cent. more Phosphate than any article now offered, at \$30 per ton, or crude, direct from Navassa Island, at proportionally low rates.

LABORATORY, 11 SALISBURY SQUARE, FLEET STREET.

Analysis of six samples, representing that number of cargoes, lately brought to England.

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Moisture.....	13.61	2.73	5.51	7.70	8.77	13.07
Water in combination and Organic Matter.....	6.72	7.39	6.50	7.04	6.67	...
*Phosphoric Acid.....	30.88	32.48	31.85	31.98	31.23	31.64
Lime.....	32.56	31.06	37.73	35.10	37.22	37.08
Oxides of Iron, Alumina, Carbonic Acid, &c.....	13.88	20.16	16.09	15.60	13.80	16.01
Insoluble Silicious Matter.....	2.35	3.18	2.32	2.58	2.31	2.22
	100	100	100	100	100	100
*Equal to Tribasic Phosphate of Lime (bone earth).....	67.41	70.90	69.50	69.81	68.18	69.07

The commercial value of Navassa Guano, it is scarcely necessary for me to say, is mainly regulated by the amount of Phosphoric Acid which it contains. In the foregoing analysis the percentage of Phosphoric Acid was accurately determined.

AUGUSTUS VOELCKER,

Prof. of Chemistry to the Royal Agricultural Society of England.

Remarks and Analysis by Dr. Sibson, of London. 11 Eaton Terrace, St. John's Wood, Dec., 1867.

Amongst the natural deposits of phosphates now at command for furnishing the constituents of our super-phosphates and other prepared manures at present so extensively consumed in our fields, that of the Island of Navassa, lately brought to notice, appears to be one of the most important. In the search for Natural Phosphates, now pretty actively prosecuted, materials of this description are sometimes found, which may possess a certain amount of scientific interest, but are of no practical importance, solely on account of their insignificant quantity. Again, a phosphate possessing almost every desirable quality, may be excluded from the market by the unfortunate fact of its percentage of Phosphate of Lime being too low. Neither of these drawbacks, however, attach to the Navassa Guano.

As I find from analyses of several cargoes lately brought to this country, that the Navassa Guano possesses a high value, I consider that it merits more than ordinary attention.

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Moisture and Water of Combination.....	10.24	9.23	5.73	12.90	11.15	6.53
*Phosphoric Acid.....	33.94	32.57	33.43	32.21	31.27	33.93
Lime.....	37.91	37.34	40.15	35.13	34.90	37.20
Carbonic Acid.....	1.39	1.20	(not determined.)		1.68	1.02
Equal to Carbonate of Lime.....	2.95	2.72	"	"	3.75	293
Oxide of Iron, &c.....	15.35	17.18	17.85	16.63	15.82	18.24
Insoluble Matter.....	2.25	2.46	2.84	2.13	5.17	3.98
	100	100	100	100	100	100
*Equal to Tribasic Phosphate of Lime.....	71.33	70.57	72.43	69.80	67.76	71.58

The average percentage of Phosphate of Lime, in most samples, I find to be over 70 per cent., which as an average, is higher than most Phosphatic materials now on the market.

ALFRED SIBSON, F. C. S., &c. Royal Agricultural College, Cirencester, England.

Analysis by Dr. Liebig, Baltimore, of cargoes lately imported.

Bark Savannah..June 8, 1868, containing, crude, 69.94—when dried, 76.61 per cent of Bone Phosphate of Lime.
Brig Cyrus Fassett, " 27, 1868, " " 68.89 " " 75.16 " "
Brig Fidelia..... 10, 1868, " " 68.87 " " 75.44 " "
Brig M. E. Banks, May 8, 1868, " " 66.03 " " 73.59 " "
Brig Romance....June 10, 1868, " " 69.11 " " 76.61 " "
Brig E. H. Rich..Sept. 21, 1868, " " 68.57 " " 74.56 " "
Brig Drego.....Aug. 12, 1868, " " 67.00 " " 75.16 " "

For Sale by Navassa Phosphate Co.

R. W. L. RASIN, General Agent,

32 SOUTH STREET, BALTIMORE.

HOOFLAND'S GERMAN BITTERS AND HOOFLAND'S GERMAN TONIC.

The Great Remedies for all Diseases of the Liver, Stomach or Digestive Organs.

HOOFLAND'S GERMAN BITTERS

is composed of the pure juices (or, as they are medicinally termed, *Extracts*) of Roots, Herbs and Barks, making a preparation highly concentrated, and entirely free from alcoholic admixture of any kind. This high concentration renders the Bitters, to those having a natural antipathy to bitter substances, rather unpalatable. To overcome this difficulty was compounded, as being the most palatable,

HOOFLAND'S GERMAN TONIC,

which is a combination of all the ingredients of the Bitters, with the purest quality of Santa Cruz Rum, Orange, &c., making one of the most pleasant and agreeable remedies ever offered to the public.

The stomach, from a variety of causes, such as Indigestion, Dyspepsia, Acute or Chronic Inflammation or Irritation of the mucous coat, Nervous Debility, etc., is very apt to have its functions deranged. The Liver, sympathizing as closely as it does with the Stomach, then becomes affected, the result of which is, that the patient suffers from several or more of the following diseases: Constipation, Flatulence, Inward Piles, Fullness of Blood to the Head, Acidity of the Stomach, Nausea, Heartburn, Disgust for Food, Fullness or Weight in the Stomach, Sour Eruptions, Sinking or Fluttering at the Pit of the Stomach, Swimming of the Head, Hurried or Difficult Breathing, Fluttering at the Heart, Choking or Suffocating Sensations when in a Lying Posture, Dimness of Vision, Dots or Webs before the Sight, Dull Pain in the Head, Deficiency of Perspiration, Yellowness of the Skin and Eyes, Pain in the Side, Back, Chest, Limbs, etc., Sudden Flushes of Heat, Burning in the Flesh, Constant Imaginings of Evil, and Great Depression of Spirits.

The sufferer from these diseases should exercise the greatest caution in the selection of a remedy for his case, purchasing only that which he is assured from his investigations and inquiries possesses true merit, is skilfull compounded, is free from injurious ingredients, and has established for itself a reputation for the cure of these diseases. In this connection we would submit those well-known remedies—

Hoofland's German Bitters and Hoofland's German Tonic.

Prepared by

DR. C. M. JACKSON, Philadelphia, Pa.

CAUTION.

Hoofland's German Remedies are counterfeited. See that the signature of C. M. JACKSON is on the wrapper of each bottle. All others are counterfeit.

Principal Office and Manufactory at the German Medicine Store, No. 631 ARCH STREET, Philadelphia, Pa.

CHARLES M. EVANS, Proprietor.

(Formerly C. M. Jackson & Co.)

PRICES.

Hoofland's German Bitters, per bottle \$1 ; per half dozen, \$5.

Hoofland's German Tonic, put up in quart bottles, \$1.50 per bottle, or a half dozen for \$7.50.

 Do not forget to examine well the article you buy, in order to get the genuine.

For sale by Druggists and Dealers everywhere.

mayly